A Bibliography of Publications in *Empirical Software Engineering*

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254

E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org (Internet)
WWW URL: https://www.math.utah.edu/~beebe/

04 June 2025
Version 1.25

Title word cross-reference

#ifdef [447, 1156]. **#SAT** [1409].

1 [837]. 2 [837]. $4 + 1$ [801]. $^{+}$ [291, 552]. $^{++}$ [763]. F [1355]. k [250]. N [1238]. φ [1355].

-measure [1355]. **-nearest** [250]. **-of-1** [1238]. **-star** [837].

13th [315]. **19** [988, 1108, 1133, 1138, 1286, 1341, 1433, 1489, 1680]. **1987** [57].

2 [56, 871]. **2000** [106]. **2002** [161]. **2010** [417].

3 [871]. **36th** [1437]. **3rd** [131].

'97 [65].

AB/BA [795]. **Abandon** [1300]. **ability** [408]. **ABLoTS** [1634]. **Abstract** [67, 1515]. **Abstraction** [230, 445, 804]. **abstracts** [99, 307, 379]. **academia** [1644]. **academic** [794, 1076]. **accelerating** [559]. **Acceptance** [226, 429, 1407, 1623]. **access** [762, 1332, 1635]. **accessibility** [595]. **accessible** [1317]. **Accumulating** [49]. **Accuracy** [206, 622, 863, 872, 971, 1571]. **accurate** [592, 1343, 1719]. **Achieving** [543, 547, 681, 863, 1375]. **Acknowledgment** [969]. **across** [1033, 1594, 1661, 1732]. **act** [533, 1478]. **acting** [1534]. **action** [1040, 1218, 1247]. **actionable** [1036]. **Actions** [1511]. **active** [830, 973]. **Activities** [609, 656, 776, 1035, 1295, 1305, 1450, 1567].

activity [958, 1327, 1636]. **actor** [664]. **actor-oriented** [664]. **actors** [839]. **actually** [722]. **ad** [1053]. **Ada** [4]. **adaptation** [405, 666, 756, 1507]. **adaptative** [522]. **adaptive** [359, 1068, 1233]. **address** [508]. **Addressing** [269, 595, 769, 1114]. **adds** [1375]. **Adequacy** [128, 1258]. **adjustment** [342]. **admitted** [754, 1043, 1111, 1169, 1222, 1284, 1323, 1331, 1332, 1377, 1445, 1710]. **Adopt** [1300]. **Adopting** [1493, 1617]. **Adoption** [458, 839, 991, 1014, 1097, 1216, 1384, 1555, 1621, 1729, 1732]. **adults** [792]. **Advancing** [1693]. **Advantages** [1303, 1405]. **Adversarial** [1072, 1193, 1507]. **Aesthetics** [164]. **Aesthetics-based** [164]. **affect** [463, 587, 948, 1136, 1472, 1581, 1632, 1682]. **affected** [644]. **affecting** [1556]. **affective** [1143]. **affects** [858]. **after** [196]. **against** [975, 1193]. **age** [807]. **agenda** [756]. **agents** [1694]. **Aggregated** [1528]. **Aggregating** [768, 816]. **aggregation** [284, 1162]. **Agile** [238, 241, 304, 353, 370, 421, 423, 499, 553, 568, 574, 722, 734, 756, 812, 878, 970, 1061, 1075, 1081, 1103, 1147, 1248, 1306, 1341, 1381, 1485, 1494, 1594, 1610, 1735]. **agility** [577]. **aging** [1033]. **Agreement** [77]. **agribot** [998]. **AI** [1076, 1153, 1256, 1537, 1586, 1662, 1703]. **AI-based** [1256]. **AI-enabled** [1537]. **AI-generated** [1703]. **AIBugHunter** [1539]. **AICs** [1238]. **aid** [322, 816]. **Aided** [17]. **Aiding** [1182]. **AIOps** [1523]. **Ajax** [375, 433]. **ALFAA** [973]. **Algorithm** [744, 791, 1606]. **Algorithm-based** [744]. **algorithms** [266, 375, 435, 572, 652, 909, 968, 1001, 1155, 1293, 1318, 1326, 1414, 1707]. **Aliasing** [973]. **aligning** [517]. **alignment** [915, 1702]. **aligns** [1015]. **Alitheia** [489]. **Alleviating** [850]. **allocation** [477]. **allocators** [603]. **Alternative** [208]. **Alternatives** [137]. **am** [1019]. **ambiguity** [1526]. **America** [1049]. **Ammonia** [996]. **Among** [272, 276, 1133, 1351, 1560, 1575]. **Amp** [1334]. **amplification** [1268, 1334]. **analogical** [882]. **Analogy** [78, 97, 159, 170, 171, 190, 261, 291, 342, 365, 405, 666]. **Analogy-Based** [78, 190, 291, 405, 666]. **Analyse** [225]. **analysers** [810]. **analyses** [1203, 1372, 1498, 1510]. **Analysing** [306, 1120, 1228, 1628]. **Analysis** [17, 26, 27, 44, 75, 86, 87, 98, 143, 157, 175, 176, 231, 235, 252, 271, 275, 286, 291, 321, 322, 324, 332, 333, 336, 337, 348, 372, 390, 408, 430, 435, 454, 481, 516, 563, 572, 599, 655, 670, 688, 710, 715, 721, 725, 757, 806, 809, 851, 859, 860, 871, 881, 922, 953, 957, 979, 981, 1010, 1064, 1065, 1106, 1108, 1118, 1194, 1201, 1215, 1217, 1220, 1231, 1249, 1254, 1258, 1262, 1337, 1343, 1344, 1351, 1385, 1387, 1410, 1414, 1420, 1432, 1439, 1446, 1468, 1470, 1485, 1519, 1554, 1558, 1579, 1597, 1609, 1627, 1684, 1700, 1722]. **analysis** [1090, 1191, 1209, 1408, 1595, 1664, 1693, 1720]. **Analysts** [44]. **Analytics** [926, 984, 1001, 1036]. **analyzability** [841]. **analyze** [766]. **Analyzing** [295, 387, 415, 612, 657, 782, 793, 1070, 1087, 1223, 1245, 1397, 1534, 1588, 1729]. **AndroEvolve** [1249]. **Android** [586, 667, 690, 739, 774, 779, 820, 837, 838, 849, 866, 907, 923, 928, 933, 935, 938–940, 953, 1000, 1018, 1033, 1062, 1064, 1071, 1106, 1108, 1113, 1121, 1138, 1197, 1203, 1240, 1249, 1290, 1317, 1361, 1402, 1428, 1510, 1583, 1666, 1748]. **anecdote** [1251]. **Angelis** [170]. **annealing** [260]. **annotated** [679, 1724]. **annotation** [1547]. **annotations** [1019, 1156, 1581]. **anomalies** [279]. **anomaly** [1386, 1517, 1630]. **anonymous** [1238]. **Ansible** [1569]. **answer** [874, 993, 1415]. **answers** [783]. **ant** [542]. **Anti** [607, 936, 973, 1035, 1069, 1616, 1635]. **Anti-Aliasing** [973]. **anti-pattern** [607, 1069]. **Anti-patterns** [936, 1035, 1616, 1635]. **antipatterns** [409, 584]. **anxiety** [1652]. **Apache** [561, 562, 647, 662, 705, 1065, 1091, 1446, 1476, 1574]. **API** [395, 424, 556, 569, 575, 647, 692,

829, 947, 983, 1062, 1071, 1129, 1134, 1190, 1196, 1204, 1249, 1443, 1496, 1512]. **API-domain** [1496]. **APIReal** [829]. **APIs** [801, 982, 1000, 1392, 1512, 1522, 1724]. **App** [612, 818, 866, 932, 941, 953, 1228, 1344, 1468, 1570, 1615, 1629, 1666, 1691, 1748]. **app-reviews** [1468]. **Applicability** [2, 63, 1225]. **Application** [5, 41, 42, 176, 213, 366, 485, 510, 646, 700, 845, 865, 966, 1059, 1162, 1276, 1411, 1490, 1551, 1660, 1725]. **application-level** [1276]. **application-specific** [1490]. **Applications** [182, 183, 254, 325, 433, 465, 480, 519, 580, 596, 616, 736, 776, 779, 904, 911, 929, 930, 933, 936, 939, 942, 943, 1138, 1199, 1240, 1302, 1317, 1319, 1325, 1379, 1434, 1444, 1537, 1598]. **Applied** [89, 260, 507, 927]. **applies** [1592]. **Applying** [29, 340, 355, 425, 479, 794, 1167, 1420, 1496, 1684]. **Appreciation** [579, 653, 758, 848, 1107]. **Appreciative** [396]. **Approach** [231, 274, 368, 370, 577, 592, 650, 651, 658, 661, 678, 692, 700, 712, 766, 774, 780, 829, 836, 888, 996, 1008, 1041, 1059, 1098, 1125, 1174, 1220, 1283, 1307, 1320, 1325, 1338, 1347, 1378, 1521, 1560, 1564, 1585, 1620, 1622, 1634, 1649, 1719, 1746]. **Approaches** [125, 394, 419, 511, 576, 813, 867, 1006, 1214, 1225, 1408, 1457, 1543, 1550, 1594]. **Approaching** [1667]. **apps** [619, 667, 739, 775, 837, 849, 928, 931, 934, 935, 938, 989, 1018, 1064, 1071, 1108, 1117, 1154, 1197, 1283, 1382, 1406, 1428, 1514, 1583, 1587, 1624]. **APR** [1149]. **APR4Vul** [1553]. **AQUA** [291]. **Archetypal** [624]. **architecting** [880]. **architectural** [392, 393, 606, 687, 841, 1278]. **Architecture** [81, 178, 217, 290, 317, 336, 355, 394, 476, 522, 566, 583, 683, 703, 749, 780, 790, 1502, 1724]. **architectures** [391, 652, 800, 873, 1374]. **areas** [294]. **ArgoUML** [1279]. **ArgoUML-SPL** [1279]. **argument** [1398]. **Aristotle** [599]. **Art** [92, 282, 1125, 1402, 1409]. **artefact** [766]. **Article** [134]. **artifact** [1128, 1245]. **Artifacts** [92, 262, 631, 860, 1051, 1078]. **artificial** [1364]. **ask** [1006]. **asked** [1415]. **asking** [615]. **AspectJ** [796]. **Assess** [18, 81, 246, 493]. **Assessing** [68, 104, 108, 137, 187, 323, 344, 354, 392, 495, 593, 610, 616, 644, 701, 779, 869, 914, 1122, 1163, 1402, 1421, 1550, 1651, 1666, 1732]. **Assessment** [109, 153, 202, 218, 235, 405, 431, 449, 522, 572, 586, 666, 737, 836, 874, 949, 955, 957, 980, 1013, 1029, 1072, 1089, 1118, 1142, 1264, 1282, 1347, 1393, 1408, 1607]. **Assessments** [77, 971]. **assets** [1559]. **assignment** [625, 658, 1038, 1061, 1320, 1412, 1572, 1617, 1734]. **assist** [1013]. **assistance** [1005]. **assisted** [1139, 1161, 1369]. **Associating** [899]. **Association** [768]. **Assumptions** [24, 220]. **Assurance** [362, 1125, 1144, 1248]. **AST** [1273]. **AST-level** [1273]. **Athos** [1360]. **atoms** [1461]. **Attachments** [1359]. **attack** [857, 949, 1193]. **attacks** [1456]. **attempts** [500]. **attention** [1369, 1492, 1693]. **attention-based** [1369]. **attitudes** [715]. **attraction** [798]. **attribute** [291]. **Attributes** [217, 302, 486, 544, 629, 651, 739]. **attribution** [885]. **augmentation** [333, 1662, 1726]. **Augmented** [1234, 1631]. **Augmenting** [814]. **Australian** [195]. **Authoring** [112]. **automata** [925]. **Automated** [266, 333, 350, 460, 529, 563, 625, 648, 683, 685, 794, 813, 823–826, 997, 1006, 1038, 1039, 1089, 1092, 1101, 1141, 1149, 1182, 1193, 1249, 1267, 1416, 1425, 1446, 1459, 1484, 1488, 1514, 1524, 1563, 1583, 1585, 1617, 1623, 1701]. **Automatic** [578, 597, 644, 709, 821, 843, 850, 896, 902, 966, 1086, 1131, 1203, 1389, 1445, 1483, 1553, 1565, 1571, 1582, 1590, 1611, 1653, 1743]. **Automatically** [480, 508, 543, 612, 654, 1095, 1191, 1275, 1607, 1620]. **automatically-generated** [1607]. **Automating** [512, 1042]. **Automation** [177, 1058]. **automotive** [863, 1420].

autonomous [1453, 1591, 1674]. **autonomy** [1147]. **AutoRELAX** [508]. **avionics** [701]. **aware** [359, 424, 774, 917, 1068, 1310, 1325, 1372, 1544, 1564, 1609, 1733]. **awareness** [1647].

BA [795]. **back** [1246]. **backers** [1114]. **Background** [203, 447]. **backstage** [1287]. **bad** [972, 1261, 1283, 1457, 1509]. **balance** [678]. **balanced** [1171]. **Balancing** [117, 872, 1044]. **Bandit** [1045]. **BarrierFinder** [1053]. **barriers** [423, 918, 1053, 1384, 1552]. **base** [727]. **base-class** [727]. **Based** [62, 70, 81, 82, 97, 111, 118, 124, 170, 171, 178, 188, 190, 196, 231, 236, 249, 255, 281, 291, 299, 306, 323, 324, 334, 336, 341–343, 351, 371, 404, 405, 444, 473, 477, 488, 492, 506, 526, 547, 551, 586, 594, 625, 649, 650, 658, 662, 671, 676, 679, 704, 717, 733, 740, 744, 826, 913, 920, 931, 942, 943, 966, 973, 995, 1037, 1063, 1109, 1121, 1140, 1190, 1215, 1230, 1239, 1247, 1256, 1300, 1301, 1320, 1346–1348, 1380, 1386, 1431, 1451, 1470, 1483, 1495, 1571, 1578, 1596, 1620, 1630, 1631, 1639, 1722, 1730]. **based** [9, 74, 78, 148, 164, 237, 240, 284, 321, 350, 375, 391, 402, 442, 443, 466, 483, 555, 576, 636, 647, 651, 661, 666, 700, 703, 746, 759, 787, 816, 822, 843, 878, 951, 960, 978, 1019, 1027, 1041, 1059, 1090, 1119, 1150, 1164, 1174, 1184, 1210, 1218, 1224, 1243, 1277, 1283, 1315, 1318, 1329, 1350, 1356, 1369, 1374, 1378, 1418, 1441, 1442, 1467, 1478, 1517, 1549, 1560, 1590, 1602, 1604, 1607, 1669, 1681, 1686, 1716, 1725, 1741, 1744]. **baseline** [955]. **Basic** [1348]. **basis** [298]. **batch** [1688]. **batching** [1707]. **battery** [1106]. **Bayesian** [313, 439, 467, 1684]. **Bazel** [1601]. **be** [424, 427, 717, 721, 876, 1153, 1419]. **Beg** [125]. **beginners** [1689]. **Behavior** [38, 361, 623, 798]. **Behavioral** [380, 1008, 1074, 1478]. **Behaviour** [100, 857, 1333]. **behavioural** [1361]. **behind** [423]. **Being** [238, 1133, 1160, 1690, 1748]. **beliefs** [1122]. **benchmark** [419, 951, 1008, 1322, 1442]. **benchmark-based** [951]. **Benchmarking** [77, 250, 1203, 1319]. **benchmarks** [659, 1186]. **benefit** [336, 537, 1305]. **Benefits** [195, 235, 280, 834, 1070, 1266]. **benign** [1428]. **BERT** [1483]. **Bertillonage** [462]. **Best** [46, 874, 1300, 1629]. **best-answer** [874]. **Better** [830, 876, 1001, 1181, 1591]. **Between** [181, 271, 308, 473, 492, 521, 524, 544, 570, 577, 581, 726, 775, 781, 788, 802, 824, 863, 872, 901, 919, 958, 1025, 1027, 1169, 1238, 1251, 1358, 1362, 1463, 1483, 1625, 1669]. **Beyond** [1113, 1414]. **bi** [373, 1582]. **bi-modal** [1582]. **bi-objective** [373]. **Bias** [206, 898, 1557, 1575]. **bias-inducing** [1557]. **biases** [1472]. **bilingual** [1214]. **binaries** [603, 604]. **binary** [1687, 1705]. **bindings** [1661]. **binomial** [299]. **Bisection** [1269]. **BizDev** [1534]. **black** [1620, 1677]. **black-box** [1620, 1677]. **bloated** [1099]. **block** [1348, 1670]. **Blockchain** [994, 1052, 1411, 1419]. **blog** [459]. **Board** [121]. **boost** [1721]. **Boosting** [582, 995, 1726, 1746]. **Bootstrap** [1687]. **born** [977]. **Borrow** [125]. **Bosch** [1505]. **both** [986]. **bots** [993, 1295, 1572]. **bottlenecks** [827]. **bound** [1657]. **Bounties** [952]. **bounty** [1114]. **box** [1620, 1668, 1677]. **Brazil** [1030]. **breaches** [961]. **break** [1005]. **Breaking** [982, 1261, 1698]. **breath** [1266]. **Breathing** [632]. **Briand** [41]. **Bridging** [1661, 1692]. **broke** [982]. **broken** [1592]. **broth** [311]. **BTLink** [1483]. **Bug** [331, 513, 540, 563, 591, 592, 625, 645, 690, 717, 786, 875, 920, 996, 1003, 1027, 1070, 1109, 1135, 1151, 1181, 1182, 1184, 1224, 1328, 1337, 1354, 1376, 1422, 1475, 1549, 1573, 1585, 1597, 1606, 1613, 1615, 1617, 1621, 1634, 1691, 1734, 1743, 1746]. **bug-finding** [1573]. **bug-inducing** [1151]. **bug-proneness** [1597]. **bugginess** [492]. **Bugs** [456, 691, 709, 823, 831, 900, 977, 989, 1124, 1178, 1198, 1226, 1272, 1292, 1399, 1442,

1476, 1545, 1576, 1585, 1678, 1723]. **Build** [420, 570, 740, 1005, 1112, 1636, 1707]. **Building** [107, 281, 400, 640, 745, 1011, 1116, 1257]. **builds** [908, 1536, 1546, 1601]. **Bullet** [44]. **business** [254, 1534, 1704]. **businesses** [1084]. **bypass** [465].

C [58, 105, 603, 604, 897, 1525, 1658]. **C-to-Rust** [1658]. **C/C** [604]. **C2M** [1352]. **caching** [1276]. **Calculation** [398, 479]. **Call** [138, 1301, 1536]. **call-based** [1301]. **Calling** [414, 1411]. **calls** [782, 1071]. **Can** [152, 253, 427, 866, 1158, 1259, 1321, 1353, 1385, 1498, 1612, 1618, 1681]. **Candidate** [217, 1623]. **Candidates** [1294, 1560]. **Cannot** [1292]. **Capability** [57, 294, 495]. **capacity** [899, 1139, 1161]. **CAPS** [983]. **Capture** [70, 201, 397, 576]. **captured** [657]. **cards** [443]. **cars** [1451]. **Case** [27, 33, 87, 112, 114, 122, 142, 152, 169, 195, 202, 218, 222, 226, 232, 256, 318, 325, 327, 330, 341, 362, 369, 386, 392, 393, 461, 465, 468, 473, 491, 499, 517, 550, 562, 564, 571, 580, 585, 593, 627, 628, 663, 703, 734, 735, 746, 748, 756, 812, 834, 914, 934, 944, 952, 970, 974, 1038, 1042, 1052, 1081, 1083, 1086, 1091, 1117, 1119, 1152, 1167, 1174, 1195, 1235, 1242, 1247, 1263, 1278, 1329, 1381, 1452, 1494, 1495, 1524, 1534, 1590, 1600, 1617, 1633, 1697, 1743, 1748]. **case-driven** [1042]. **Cases** [205, 223, 235, 429, 473, 526, 1125, 1233, 1279, 1602, 1712]. **Catalog** [911, 938]. **catch** [1311]. **Categories** [191, 480, 521, 1006]. **categorisation** [1514]. **Categorizing** [886]. **category** [1182]. **Causal** [1182, 1624, 1684, 1702]. **caused** [1585]. **Causes** [928, 1030, 1062, 1546, 1598]. **CD** [1432, 1697]. **CDA** [1000]. **celebrated** [721]. **Center** [195]. **Central** [1261]. **centric** [407, 519, 1268]. **chains** [1675]. **challenge** [857, 1573]. **Challenges** [343, 355, 394, 496, 498, 517, 545, 745, 749, 784, 790, 832, 865, 991, 1070, 1132, 1144, 1183, 1192, 1248, 1297, 1424, 1551, 1595, 1633, 1673, 1735]. **Change** [26, 111, 200, 246, 352, 384, 408, 409, 454, 476, 535, 556, 636, 670, 715, 732, 768, 788, 807, 899, 950, 966, 995, 1069, 1440, 1494, 1585, 1648, 1669, 1708, 1722]. **change-** [409, 1069]. **Change-based** [636]. **change-proneness** [384, 408]. **Changeability** [137]. **ChangeLocator** [822]. **Changes** [377, 416, 463, 590, 598, 607, 647, 671, 675, 699, 706, 766, 822, 835, 864, 895, 913, 982, 1008, 1058, 1112, 1124, 1127, 1151, 1223, 1261, 1275, 1306, 1363, 1410, 1421, 1494, 1600, 1698]. **changing** [1103]. **Characterisation** [229]. **Characterising** [1000]. **characteristic** [402]. **Characteristics** [113, 187, 309, 393, 492, 513, 524, 797, 876, 934, 992, 1034, 1449, 1485, 1523, 1535, 1548]. **Characterization** [236, 260, 476, 972, 1549]. **Characterizing** [231, 662, 910, 936, 1018, 1088, 1175, 1274, 1294]. **Charting** [575]. **chatbot** [1689]. **ChatGPT** [1641]. **Cheap** [643]. **checking** [464]. **checklist** [347]. **Checklists** [51]. **Checkstyle** [1313]. **cherry** [1181]. **Chidamber** [214]. **choose** [702]. **Chrome** [786, 873]. **Chromium** [691]. **CI** [1432, 1697]. **CI/CD** [1432, 1697]. **circle** [771]. **circuit** [1580]. **city** [930]. **Class** [223, 281, 363, 364, 409, 486, 512, 727, 1142, 1188, 1429]. **classes** [276, 788, 1238, 1417]. **Classification** [64, 75, 79, 117, 123, 167, 190, 202, 218, 445, 488, 555, 604, 978, 1042, 1155, 1164, 1414, 1467, 1468, 1650, 1687, 1730, 1744]. **Classification-Tree** [117, 123]. **classifications** [1355]. **classifier** [1406, 1671]. **classifiers** [1056, 1057, 1383, 1510, 1602, 1620]. **classify** [480, 1006]. **Classifying** [845, 892, 983, 1275, 1539]. **client** [433, 949, 1490, 1624]. **client-side** [1490, 1624]. **client/server** [949]. **clients** [801]. **climate** [308, 474, 1177]. **climbing** [507]. **clone** [316, 623, 659, 876, 912, 1654, 1669, 1702]. **Cloned** [761, 803]. **CloneRipples** [1669].

Clones [322, 346, 418, 555, 596, 623, 876, 893, 1280, 1450, 1699, 1704]. **Cloning** [319, 1052]. **closed** [367]. **closed-source** [367]. **closeness** [1230]. **cloud** [528, 1271, 1319, 1732]. **cloud-native** [1319]. **clustering** [455, 583, 622, 703, 1021, 1607, 1700]. **clustering-based** [703]. **CMFuzz** [1068]. **CMM** [56]. **Co** [264, 382, 766, 788, 1120, 1235, 1432]. **co-change** [788]. **Co-Editing** [1120]. **co-evolution** [264, 382, 766]. **co-located** [1235]. **co-usage** [1432]. **CoCoAST** [1515]. **Code** [4, 70, 83, 96, 345, 415, 416, 493, 505, 514, 519, 538, 541, 567, 587, 590, 596, 597, 601, 608, 614, 623, 696, 704, 724, 738, 800, 806, 835, 858, 885, 893, 899, 913, 922, 923, 928, 938, 950, 982, 985, 1004, 1012, 1032, 1052, 1058, 1066, 1165, 1171, 1190, 1206, 1212, 1230, 1238, 1252, 1254, 1259, 1265, 1267, 1275, 1280, 1304, 1335, 1338, 1339, 1362, 1363, 1367, 1384, 1396, 1450, 1462, 1472, 1480, 1499, 1506, 1508, 1509, 1515, 1528, 1542, 1554, 1555, 1564, 1577, 1578, 1581, 1654, 1657, 1662, 1667, 1672, 1680, 1702, 1709, 1722, 1726, 1728]. **code** [248, 322, 346, 382, 495, 524, 555, 581, 641, 660, 673, 710, 761, 773, 774, 791, 802, 810, 814, 816, 852, 864, 868, 877, 887, 889, 892, 897, 902, 912, 948, 949, 954, 1022, 1035, 1055, 1059, 1087, 1127, 1134, 1152, 1186, 1191, 1217, 1223, 1253, 1255, 1258, 1273, 1281, 1295, 1350, 1361, 1373, 1387, 1410, 1443, 1461, 1467, 1482, 1487, 1521, 1535, 1540, 1541, 1548, 1623, 1624, 1648, 1651–1653, 1669, 1679, 1682, 1689, 1693, 1699, 1703, 1705, 1708, 1714, 1716, 1723, 1744, 1745]. **Code-centric** [519]. **code-clones** [1699]. **code-example** [1190]. **Code-Issue-Introducing** [913]. **code-removal** [1267]. **coding** [580, 944, 946, 954, 1201]. **Coevolution** [631, 1320]. **coevolution-based** [1320]. **CoFI** [464]. **cognition** [1251]. **cognitive** [582, 1003, 1265, 1372]. **Cohesion** [52, 661]. **Collaboration** [1644, 1700]. **collaborative** [528, 705, 1085, 1106, 1131, 1357, 1463, 1615, 1691]. **Collecting** [82, 216, 1195]. **Collection** [224, 270, 487, 1229]. **collections** [688]. **collective** [1041, 1253]. **collectives** [1195]. **colony** [542]. **color.js** [1712]. **colors** [447]. **combination** [256]. **combinatorial** [1016, 1239]. **combining** [362, 495, 1402, 1452, 1636, 1720]. **COMBO** [1045]. **Come** [1246, 1473, 1714]. **command** [1241]. **command-line** [1241]. **comment** [1004, 1127, 1188, 1323, 1577]. **comment-edit** [1127]. **commentaries** [847]. **Commenting** [889]. **Comments** [41, 42, 170, 171, 757, 892, 1188, 1466, 1728]. **commerce** [616]. **Commercial** [142, 143, 183]. **commit** [492, 1012, 1289, 1342, 1410, 1471, 1636]. **commit-level** [1410]. **commit-relevant** [1289]. **commits** [910, 1008, 1098, 1205, 1337, 1412, 1483, 1639]. **Commonly** [86, 186]. **commons** [1699]. **communicating** [1520]. **communication** [304, 337, 422, 915, 958, 1047, 1048, 1235, 1352, 1458]. **communications** [1231]. **communities** [459, 1040, 1335, 1605]. **community** [491, 531, 561, 623, 767, 888, 990, 1481]. **companie** [1489]. **Companies** [172, 175, 423, 517, 851, 1524, 1695]. **company** [289, 339, 840, 927, 954, 1150, 1225, 1391]. **company-specific** [954]. **Comparative** [79, 109, 182, 202, 377, 401, 652, 803, 1231, 1276, 1579]. **Comparing** [4, 13, 69, 186, 199, 290, 325, 356, 528, 614, 884, 1019, 1096, 1355, 1725]. **Comparison** [10, 40, 62, 363, 405, 410, 419, 473, 576, 737, 810, 840, 861, 924, 931, 1006, 1154, 1169, 1252, 1491, 1510, 1530, 1594, 1703]. **comparisons** [259, 488]. **compatibility** [620, 1062]. **competing** [1154]. **competition** [449]. **compilation** [330, 884]. **compiler** [271, 1333, 1746]. **compilers** [1368]. **complaints** [430, 837, 838]. **Completing** [1466]. **Completion** [1273, 1462, 1611].

complex [1288]. **complexities** [1044]. **complexity** [14, 254, 738, 858, 1671]. **compliance** [1583, 1666]. **Component** [264, 391, 393, 559, 841, 1172, 1277, 1600]. **component-based** [391, 1277]. **components** [828, 977, 1095, 1600]. **compose** [1172, 1584]. **composite** [344]. **composition** [1584]. **compound** [1488]. **comprehend** [862]. **comprehending** [884, 1367]. **Comprehensibility** [483, 816, 1528, 1561]. **Comprehension** [28, 158, 213, 320, 324, 410, 432, 434, 447, 501, 557, 695, 737, 817, 855, 881, 1002, 1088, 1182, 1207, 1339, 1438, 1448, 1461, 1627, 1651]. **Comprehensive** [160, 883, 935, 1033, 1099, 1267, 1297, 1595, 1608, 1747]. **compressed** [1716]. **compressors** [1026]. **Computation** [309, 1520]. **Computer** [17, 98, 422, 881, 1150, 1266, 1633]. **Computer-Aided** [17]. **Computer-mediated** [422]. **Computerized** [45]. **computing** [379, 1086, 1715]. **concept** [324, 572, 978, 1030, 1614]. **concept-based** [978]. **Conceptual** [230, 454, 622, 1302, 1489]. **concern** [804]. **concerning** [983]. **concerns** [1183, 1493, 1629]. **Conclusion** [1063, 1210]. **Conclusions** [196, 445]. **concurrent** [286, 406, 827, 852]. **conditional** [884]. **conduct** [1357]. **Conducting** [134, 177, 327, 489, 1028]. **Conference** [59, 315, 1437]. **confidence** [1115]. **Configurable** [766, 789, 1123, 1227, 1319, 1329, 1413, 1532]. **configuration** [535, 630, 869, 914, 976, 1067, 1409, 1498]. **configurations** [1072]. **configure** [441, 1191]. **Configuring** [477]. **confirmation** [898]. **conflict** [797, 1407]. **conflicts** [918, 958, 962, 1559]. **Confounding** [557]. **confusing** [1488]. **confusion** [1066, 1461]. **connecting** [433]. **connectivity** [1197]. **Consensus** [1638]. **consequences** [1030]. **conservatively** [1333]. **Considerations** [1339]. **considered** [319]. **considering** [1559]. **Consistencies** [57]. **consistency** [294, 749, 790, 837, 849, 1071, 1583]. **consistent** [302]. **consolidation** [244, 411]. **constitutes** [1497]. **constrained** [374]. **constraint** [573, 650, 1045]. **Constraints** [113]. **Construction** [213, 223, 659]. **constructs** [1664]. **Consulting** [172]. **consumption** [535, 866, 1106]. **contact** [1108]. **container** [1584]. **Content** [188, 886, 1168]. **context** [514, 518, 583, 774, 966, 1068, 1234, 1426, 1474, 1534, 1700]. **context-aware** [774, 1068]. **context-based** [966]. **contexts** [625, 981, 1211]. **contextual** [592, 1312]. **continuous** [681, 880, 908, 972, 1008, 1244, 1305, 1329, 1477, 1524, 1556, 1601, 1636, 1707, 1737]. **Continuously** [588, 875]. **contract** [1183, 1499, 1548]. **Contracts** [994, 1052, 1343, 1522, 1608, 1719, 1720, 1742]. **Contradictions** [1528]. **Contrasting** [1525, 1688]. **contrastive** [1654, 1734, 1745]. **contribute** [1246, 1537]. **contributing** [1098]. **contribution** [791, 1561, 1680]. **Contributions** [464, 531, 1044, 1245, 1294, 1455, 1463, 1530]. **Control** [55, 58, 165, 482, 588, 973, 1147, 1327, 1625]. **Controlled** [39, 137, 199, 226, 228, 242, 290, 323, 516, 527, 573, 696, 716, 729, 816, 898, 1116, 1339, 1350, 1390, 1684, 1724]. **Controller** [800]. **controllers** [482]. **Controlling** [123, 362]. **controls** [1013]. **conventional** [759]. **conventions** [1313]. **conversation** [1366]. **conversational** [1689]. **conversations** [1518, 1641]. **converted** [1518]. **convertibility** [494]. **cooks** [311]. **cooperation** [643]. **Cooperative** [301]. **coordination** [337, 599, 712, 1046, 1381, 1494, 1531]. **Copilot** [1509]. **CORBA** [82, 961]. **CORBA-Based** [82]. **core** [489, 1246]. **coronavirus** [1113]. **coronavirus-themed**

[1113]. **corpora** [901]. **corporation** [1562]. **corpus** [894]. **correcting** [973]. **Correction** [105, 439, 943, 1048, 1057, 1088, 1111, 1139, 1207, 1264, 1321, 1405, 1642, 1659, 1691, 1708, 1741]. **Corrective** [212]. **Correctness** [798, 831]. **correlation** [271, 726, 824, 1546]. **Correlations** [492, 591]. **Correspondence** [98, 1073]. **CoRT** [1578]. **COSMIC** [494]. **Cost** [97, 124, 160, 170, 171, 182, 219, 235, 336, 342, 352, 365, 402, 469, 708, 1284, 1305, 1329, 1358, 1391]. **cost-benefit** [1305]. **Cost-effective** [124, 1329]. **cost-to-fix** [708]. **Costs** [64, 111, 585]. **COTS** [249]. **COTS-based** [249]. **coupling** [321, 397, 788, 1073]. **couplings** [454]. **cover** [1681]. **coverage** [299, 306, 406, 543, 1348, 1356, 1396, 1609]. **COVID** [988, 1108, 1133, 1138, 1286, 1341, 1433, 1489, 1680]. **COVID-19** [988, 1108, 1133, 1138, 1286, 1341, 1433, 1489, 1680]. **crash** [591, 822, 951, 995, 1348, 1587]. **crash-inducing** [822, 995]. **crashing** [1429]. **create** [1695]. **created** [430]. **creates** [767]. **creation** [683, 1373]. **creativity** [711]. **CREWS** [112]. **criteria** [260, 299, 372, 1431]. **Criterion** [128, 306]. **Critical** [87, 255, 648, 970, 1010, 1270]. **Critiquing** [45]. **CROKAGE** [1054]. **Cross** [289, 339, 571, 582, 639, 707, 742, 770, 837, 893, 927, 986, 1024, 1063, 1225, 1378, 1458, 1490, 1507, 1551, 1600, 1649]. **cross-** [289]. **cross-case** [571]. **cross-company** [339, 927, 1225]. **cross-component** [1600]. **cross-language** [770]. **cross-platform** [837, 1024]. **Cross-project** [582, 639, 707, 742, 893, 986, 1063, 1225, 1378, 1507, 1649]. **cross-site** [1490]. **Cross-status** [1458]. **Cross-version** [986]. **CROSSMINER** [1126]. **crossover** [795, 1374]. **crowd** [1054, 1059, 1643]. **crowd-based** [1059]. **Crowdsmelling** [1253]. **crowdsourced** [791, 865, 902, 980]. **crowdsourcing** [961]. **CSAFuzzer** [1720]. **CsmithEdge** [1333]. **CT** [1239]. **CT-IoT** [1239]. **CTDip** [1746]. **culture** [1084]. **curates** [767]. **Curating** [743, 1021]. **Current** [144]. **curve** [253]. **curves** [402]. **custom** [603]. **customer** [945]. **customization** [1241, 1247]. **cyber** [1398, 1700]. **cyber-physical** [1700]. **CyberSAGE** [1398]. **cybersecurity** [1456]. **cycle** [313, 918]. **cycles** [276, 765].

danger [1526]. **dashboard** [1447]. **Data** [38, 86, 87, 152, 187, 224, 225, 250, 266, 270, 334, 337, 339, 362, 363, 387, 404, 440, 487, 495, 533, 575, 604, 645, 657, 732, 742, 745, 769, 771, 772, 789, 820, 867, 894, 926, 984, 986, 1001, 1031, 1045, 1056, 1057, 1062, 1087, 1229, 1249, 1332, 1337, 1346, 1371, 1372, 1387, 1395, 1426, 1438, 1606, 1614, 1635, 1660, 1662, 1671, 1684, 1726, 1735]. **Data-access** [1635]. **Data-driven** [1045, 1062]. **Data-efficient** [789]. **data-intensive** [1426, 1635]. **Database** [289, 935, 1332, 1729]. **dataset** [403, 692, 694, 709, 1106, 1434, 1527]. **datasets** [1109, 1342, 1406]. **dates** [689]. **day** [1159]. **DDImage** [1620]. **dead** [1254, 1444]. **Deal** [150]. **debate** [1304]. **Debian** [1090]. **Debian-based** [1090]. **debloating** [1379]. **Debsources** [694]. **debt** [585, 754, 1030, 1043, 1093, 1111, 1143, 1169, 1222, 1284, 1323, 1331, 1332, 1377, 1415, 1445, 1592, 1710]. **DebtFree** [1284]. **Debugging** [670, 1497, 1701]. **decade** [511, 782]. **decades** [694]. **decay** [1471]. **Decision** [46, 336, 565, 877, 1571]. **Decision-making** [565, 1571]. **decisions** [1537]. **declarative** [1420]. **declared** [1071]. **decompiler** [1428]. **decomposition** [1264, 1282, 1724]. **decompositions** [629]. **dedicated** [1303, 1405]. **Deep** [1004, 1017, 1092, 1093, 1095, 1158, 1204, 1214, 1217, 1266, 1280, 1285, 1321, 1347, 1351, 1368, 1414, 1456, 1457, 1545, 1588, 1596, 1602, 1609, 1630, 1633, 1656, 1660, 1669, 1678, 1686, 1692, 1721, 1741, 1744]. **DeepCSS** [1744]. **deeper** [963]. **Default** [220, 444]. **Defect** [13, 155, 311, 313, 314, 325, 326, 339, 357, 362,

367, 376, 413, 419, 430, 439, 440, 467, 490, 510, 582, 590, 622, 639, 640, 655, 707, 742, 867, 872, 903, 917, 978, 986, 1039, 1056, 1057, 1063, 1142, 1162, 1225, 1229, 1285, 1310, 1358, 1378, 1501, 1504, 1507, 1555, 1622, 1642, 1649, 1692]. **defect-detection** [13]. **defectiveness** [1417]. **Defects** [124, 393, 708, 778, 844, 965, 1032, 1385, 1473]. **Defects4j** [709, 1178]. **defense** [469]. **Degrading** [19]. **Deja** [1372]. **delay** [689, 765]. **delayed** [708]. **delegation** [1064]. **delivery** [681, 880, 1477]. **Demystifying** [1070, 1198]. **denormalization** [1249]. **density** [490, 551, 1446]. **Dependability** [19]. **dependable** [1049]. **Dependabot** [1619, 1747]. **Dependence** [58, 1535]. **dependences** [309]. **dependencies** [561, 607, 704, 740, 753, 1029, 1099, 1136, 1230, 1747]. **dependency** [390, 861, 1119, 1134, 1296, 1301]. **dependent** [1600]. **Depiction** [46]. **deployed** [1108, 1183]. **deployment** [423, 681, 880]. **Deprecated** [1000]. **deprecation** [801, 947]. **depth** [8, 638, 691, 1142, 1739]. **Deriving** [987, 996]. **describing** [771]. **Description** [142]. **descriptions** [920, 1047, 1048, 1362, 1422]. **Descriptive** [150]. **Design** [40, 63, 73, 137, 199, 364, 376, 516, 565, 607, 733, 795, 975, 1015, 1030, 1045, 1047, 1048, 1069, 1210, 1211, 1247, 1287, 1316, 1474, 1512, 1537, 1597, 1727]. **Designed** [199]. **designers** [750]. **Designing** [177, 930]. **Designs** [122]. **desktop** [528, 1444]. **detail** [587]. **detailed** [677]. **detect** [1008, 1345, 1362, 1392, 1456]. **detectability** [1370]. **detectable** [1018]. **detected** [1151]. **Detecting** [338, 475, 541, 833, 844, 932, 936, 953, 1073, 1516, 1526, 1540, 1719]. **Detection** [13, 69, 124, 155, 316, 351, 592, 597, 603, 604, 614, 671, 774, 777, 1029, 1062, 1121, 1165, 1215, 1253, 1263, 1335, 1338, 1361, 1380, 1386, 1397, 1418, 1422, 1452, 1457, 1488, 1510, 1514, 1517, 1557, 1578, 1604, 1608, 1630, 1645, 1654, 1702, 1705, 1746]. **detections** [634]. **detectors** [586, 1402]. **determination** [1740]. **determine** [1487]. **Determining** [191]. **Developer** [382, 440, 562, 623, 712, 750, 772, 829, 973, 1003, 1005, 1012, 1177, 1179, 1192, 1196, 1231, 1236, 1245, 1268, 1286, 1345, 1384, 1401, 1500, 1514, 1550, 1638, 1641, 1666, 1712]. **Developer-centric** [1268]. **developer-oriented** [1005]. **developer-sensitive** [1345]. **Developers** [311, 424, 461, 481, 537, 539, 584, 601, 615, 620, 668, 702, 741, 753, 760, 775, 856, 866, 868, 976, 981, 1006, 1185, 1206, 1246, 1251, 1266, 1290, 1294, 1397, 1410, 1433, 1492, 1508, 1534, 1541, 1612, 1663, 1711, 1732, 1742]. **Developing** [338, 340, 421, 1366]. **Development** [12, 88, 145, 201, 206, 211, 222, 225, 238, 241, 244, 246, 249, 254, 255, 285, 287, 301, 303, 304, 370, 377, 386, 388, 404, 425, 449, 464, 472, 474, 485, 488, 499, 553, 566, 574, 596, 705, 720, 731, 734, 756, 759, 772, 776, 777, 787, 793, 817, 869, 878, 921, 970, 1024, 1035, 1037, 1077, 1081, 1102, 1120, 1126, 1131, 1147, 1157, 1183, 1201, 1206, 1244, 1248, 1306, 1327, 1341, 1352, 1365, 1368, 1381, 1384, 1447, 1449, 1458, 1543, 1552, 1699, 1735, 1738, 1740]. **device** [361, 739]. **devices** [1106]. **DevOps** [1084, 1530]. **Diagram** [55, 281]. **Diagrams** [223, 344, 363, 364, 587]. **dialogue** [775]. **dictionary** [597]. **diff** [968]. **difference** [901, 1594, 1605]. **Differences** [201, 905, 1160, 1238, 1625]. **Different** [118, 364, 968, 981, 1093, 1192, 1350, 1445, 1732]. **Differential** [521, 1414]. **differentiated** [472, 714, 1499]. **difficulties** [400]. **diffuseness** [773]. **diffusion** [1657]. **digital** [1591]. **Dimension** [57]. **dimensional** [1090]. **directed** [654]. **Directions** [92, 93]. **directives** [424]. **Dirichlet** [477]. **disadvantages** [1303, 1405]. **disciplining** [1156]. **discover** [1226]. **discovered** [634, 778]. **Discovering** [888, 1067]. **discovery** [298, 652]. **discrepancy** [781]. **Discuss** [722, 1017]. **Discussion** [1384, 1606]. **Discussions**

[882, 1179, 1192, 1210, 1216, 1286, 1314, 1518]. **Dissertation** [99]. **distance** [498]. **distilled** [864]. **distinguishes** [956]. **Distributed** [82, 287, 290, 353, 422, 499, 568, 588, 705, 1307, 1352]. **Distribution** [191]. **Distributions** [214, 609, 1328, 1427]. **Divergence** [1285]. **DiverGet** [1347]. **Diversity** [1146, 1215, 1463, 1530, 1572, 1740, 1746]. **diversity-guided** [1746]. **DLL** [900]. **DNN** [1164, 1526]. **DNN-based** [1164]. **Do** [311, 447, 459, 537, 539, 670, 691, 741, 753, 816, 823, 852, 866, 868, 976, 1006, 1017, 1032, 1051, 1164, 1188, 1208, 1265, 1290, 1308, 1460, 1472, 1476, 1492, 1512, 1522, 1529, 1581, 1594, 1673, 1695, 1711]. **Docker** [1090, 1172, 1584]. **Dockerfile** [1599]. **Dockerfiles** [1222]. **Documentation** [36, 212, 424, 569, 1196, 1377, 1466, 1480, 1486, 1502, 1540, 1731]. **Documenting** [697]. **Documents** [40, 611, 831]. **Does** [50, 145, 587, 772, 819, 948, 1016, 1142, 1455, 1485, 1542, 1601, 1605, 1632, 1682]. **Domain** [410, 469, 480, 656, 663, 716, 770, 817, 843, 844, 937, 1360, 1474, 1496, 1507, 1551]. **domain-driven** [1474]. **Domain-specific** [410, 663, 716, 770, 817, 937, 1360]. **donations** [1195]. **downside** [1664]. **Downstream** [222]. **drift** [1614]. **Driven** [244, 285, 303, 345, 370, 390, 429, 472, 485, 519, 731, 787, 793, 925, 970, 1042, 1045, 1062, 1102, 1176, 1474, 1615, 1627, 1691, 1701]. **driver** [1141]. **drivers** [352, 361]. **driving** [1451, 1453, 1591, 1674]. **Droid** [934]. **DroidLeaks** [935]. **dual** [1667]. **due** [689]. **DUO** [1001]. **Duplicate** [592, 635, 813, 875, 1397]. **duration** [295, 908]. **During** [38, 129, 216, 375, 870, 920, 1003, 1013, 1133, 1286, 1363, 1433]. **Dynamic** [14, 153, 265, 309, 461, 618, 1255, 1379, 1660, 1707]. **Dynamical** [1215]. **dynamically** [1334]. **dynamics** [663]. **dyslexia** [881].

E-APR [1149]. **e-commerce** [616]. **EA** [1307]. **Early** [30, 113, 313, 362, 762, 835, 1108, 1216, 1286, 1564, 1621]. **early-deployed** [1108]. **EASE** [106]. **Eclipse** [647, 1168]. **economic** [280]. **Economics** [234, 380]. **ecosystem** [491, 716, 900, 1082, 1099, 1105, 1159, 1168, 1388, 1464, 1519, 1546]. **ecosystems** [647, 861, 1110, 1643, 1661]. **ECSER** [1383]. **edge** [1479]. **edit** [1127]. **Editing** [1120]. **edition** [1527]. **editor** [21, 799, 821, 916, 922, 988, 1085]. **Editorial** [1, 7, 16, 54, 95, 106, 121, 133, 310, 358, 451, 506, 532, 536, 589, 602, 637, 649, 676, 686, 695, 718, 764, 890, 926, 929, 979, 984, 999, 1538]. **Editors** [315, 329]. **edits** [1389]. **Education** [61, 192, 484]. **educational** [335]. **Educators** [61]. **Effect** [17, 158, 254, 285, 370, 567, 698, 795, 962, 1047, 1048, 1142, 1671]. **Effective** [124, 553, 717, 809, 863, 953, 1054, 1233, 1239, 1329, 1333, 1393, 1498]. **effectively** [1652, 1668, 1681]. **Effectiveness** [14, 192, 237, 246, 265, 306, 313, 328, 356, 470, 475, 493, 549, 611, 656, 677, 716, 850, 966, 1020, 1062, 1149, 1171, 1224, 1269, 1517, 1594, 1650, 1682, 1725]. **Effects** [272, 337, 377, 484, 514, 630, 724, 731, 793, 807, 1065, 1244, 1250, 1295, 1469, 1500, 1555, 1580, 1664]. **effectually** [1357]. **Efficacy** [74]. **Efficiency** [104, 337, 364, 493, 549, 655, 716, 1525, 1679, 1725]. **Efficient** [97, 170, 171, 789, 814, 1209]. **efficiently** [1394]. **Effort** [78, 159, 206, 207, 254, 261, 289, 291, 348, 352, 378, 401, 405, 425, 426, 428, 434, 439, 441, 446, 488, 548, 635, 666, 672, 728, 863, 878, 917, 927, 949, 1225, 1304, 1310, 1327, 1436, 1478, 1555, 1564]. **effort-aware** [917, 1310, 1564]. **EIF** [1041]. **Eiffel** [681]. **electronic** [831]. **element** [1540]. **elements** [317]. **elicitation** [552, 711]. **elicitations** [422]. **elicited** [387]. **Eliciting** [396]. **elimination** [446, 523]. **Elixir** [1482]. **Emam** [42]. **Eman** [41]. **embedded** [464, 1055, 1423]. **Embedding** [1134, 1135, 1613]. **embeddings** [1252, 1259]. **emergency** [667]. **emerging** [1125]. **EMF** [1558]. **Emoji** [1503]. **emotions** [757]. **Empathy** [1740]. **Empirical**

[9, 22, 23, 25, 47, 49, 58, 59, 65, 67, 74, 78, 89–93, 95, 100, 102, 103, 110, 114, 116, 125, 127, 128, 133, 134, 160, 161, 164, 168, 170, 171, 175, 177, 181, 185, 188, 202, 214, 218, 231, 235, 236, 257, 262, 266, 267, 271, 282, 296, 316, 335, 349, 394, 444, 519, 538, 544, 570, 579, 586, 609, 613, 617, 626, 669, 680, 720, 724, 755, 781, 788, 828, 900, 931, 939, 949, 974, 1058, 1072, 1189, 1219, 1222, 1292, 1439, 1465, 1528, 1538, 1568, 1600, 1603, 1647, 1713]. **empirical** [247–249, 253, 270, 276, 279, 292, 297, 309, 324, 341, 344, 347, 355, 366, 404, 424, 429, 463, 469, 482, 504, 505, 515, 554, 559, 581, 588, 594, 596, 619, 621, 624, 632, 641, 667, 732, 737, 740, 762, 786, 809, 838, 842, 847, 854, 861, 870, 871, 874, 907, 908, 921, 933, 938, 946, 962, 964, 992, 1010, 1011, 1016, 1024, 1034, 1100, 1104, 1148, 1159, 1185, 1192, 1224, 1229, 1317, 1323, 1326, 1332, 1360, 1373, 1386, 1416, 1418, 1419, 1428, 1479, 1520, 1532, 1533, 1535, 1553, 1580, 1593, 1613, 1631, 1639, 1641, 1661, 1726, 1730]. **empirical** [88, 243, 254, 284, 346, 364, 384, 445, 476, 478, 495, 556, 565, 572, 576, 595, 636, 653, 665, 701, 746, 752, 758, 773, 796, 841, 848, 879, 880, 955, 967, 972, 988, 1020, 1103, 1107, 1124, 1179, 1184, 1208, 1213, 1240, 1241, 1314, 1336, 1342, 1361, 1368, 1391, 1408, 1438, 1443, 1449, 1473, 1476, 1530, 1541, 1545, 1548, 1566, 1569, 1574, 1594, 1599, 1619, 1650, 1678, 1704, 1714, 1723]. **Empirically** [178, 466, 1452, 1495]. **Empirically-Based** [178]. **Employees** [147, 1150]. **Employing** [580]. **Empowering** [894]. **EMSE** [245]. **enabled** [1537]. **Enabling** [173, 1087]. **Encapsulation** [38]. **encoders** [1667]. **EnCoSum** [1506]. **encourage** [449]. **end** [1092, 1288]. **end-to-end** [1092]. **endeavor** [1247]. **ends** [1629]. **Energy** [779, 866, 896, 911, 1307, 1520, 1525, 1566, 1612]. **enforced** [1433]. **engage** [981, 1401]. **engagement** [1236]. **engine** [415, 1443]. **engineer** [715]. **engineered** [743, 1021]. **Engineering** [5, 12, 13, 17, 38, 49, 56, 61, 67, 72, 73, 93, 95, 102, 116, 125, 127, 130, 133, 134, 144, 145, 147, 152, 161, 170, 171, 195, 197, 204, 216, 222, 257, 262, 292, 296, 297, 307, 315, 340, 355, 371, 380, 381, 385, 404, 444, 471, 489, 506, 519, 527, 533, 579, 626, 649, 669, 676, 704, 718, 719, 725, 733, 755, 840, 842, 847, 851, 926, 929, 957, 984, 990, 1015, 1047–1049, 1115, 1145, 1189, 1228, 1235, 1259, 1270, 1305, 1431, 1435, 1468, 1533, 1538, 1544, 1567, 1575, 1626, 1628]. **engineering** [41, 42, 282, 284, 298, 310, 327, 349, 358, 399, 403, 429, 438, 442, 443, 451, 466, 478, 487, 507, 565, 600, 602, 618, 643, 646, 651, 653, 656, 723, 758, 784, 805, 848, 879, 988, 1028, 1096, 1107, 1122, 1126, 1128, 1146, 1176, 1180, 1187, 1213, 1236, 1318, 1372, 1423, 1570, 1665, 1694, 1706, 1737]. **engineering-** [646]. **Engineers** [103, 107, 224, 232, 272, 624, 956, 1616, 1690]. **engines** [479, 660, 1513]. **enhance** [311]. **Enhanced** [763, 1364, 1430, 1506, 1722, 1740]. **enhancement** [350, 711]. **enhancements** [1627]. **Enhancing** [1417, 1422, 1441, 1662, 1678, 1705]. **Enjoy** [1194]. **enough** [818, 1263]. **Enriching** [1743]. **Ensemble** [625, 878, 1193, 1378, 1436]. **Ensemble-based** [625, 878]. **EnTagRec** [763]. **enterprise** [354, 1534]. **Enterprises** [142, 143, 496, 568]. **entities** [538]. **entrepreneurial** [1157]. **entropy** [463]. **envelopment** [337]. **Environment** [199, 353, 485]. **environments** [781, 817, 1524]. **episodes** [1497]. **EPMcreate** [711]. **equal** [430]. **equivalent** [1380]. **era** [1454]. **Ericsson** [734, 812, 1617]. **Erratum** [675, 790]. **error** [402, 445, 550, 759, 846, 1010]. **errors** [973]. **es5.ext** [1712]. **ESSDE** [88]. **ESSMArT** [945]. **Establishing** [1255]. **estimate** [488]. **Estimates** [219]. **Estimating** [14, 159, 682]. **Estimation** [78, 97, 111, 160, 170, 171, 182, 186, 188, 190, 206, 207, 211, 261, 291, 342, 343, 348, 365, 378, 402, 405, 426, 428, 441, 446, 469, 548, 666, 728, 927, 1150, 1225, 1327, 1376, 1436, 1478]. **estimations** [1391, 1413]. **Estimator** [105]. **Ethereum**

[994, 1052, 1183, 1343, 1411, 1419, 1548, 1719]. **Ethical** [127, 141, 143–145, 148, 1104, 1629]. **Ethics** [95, 102, 139, 140, 142, 143, 1202, 1586]. **ethnic** [1530]. **ethnicity** [1463]. **Ethnographic** [209, 1248]. **Europe** [1049]. **Evaluate** [39, 148]. **Evaluating** [8, 27, 192, 277, 292, 312, 334, 374, 383, 419, 607, 738, 1135, 1151, 1156, 1165, 1315, 1383, 1406, 1409, 1436, 1452, 1468, 1513, 1554, 1654, 1728, 1731]. **Evaluation** [22, 55, 64, 70, 114, 128, 154, 164, 178, 196, 240, 248, 256, 266, 290, 316, 335, 336, 341, 345, 391, 401, 407, 494, 507, 510, 512, 622, 636, 661, 701, 724, 780, 888, 951, 1079, 1189, 1305, 1342, 1352, 1360, 1398, 1504, 1505, 1557, 1583, 1596, 1721]. **Evaluations** [188, 383]. **evasion** [1193]. **event** [345, 375]. **event-driven** [345]. **events** [526, 729, 1373]. **eventual** [1197]. **Every** [50, 1005]. **evidence** [349, 544, 626, 784, 816, 1037, 1251, 1470]. **evidence-based** [1037, 1470]. **Evolution** [3, 34, 47, 83, 88, 264, 330, 352, 376, 382, 392, 420, 455, 536, 556, 558, 559, 687, 693, 766, 799, 859, 861, 916, 928, 979, 1007, 1018, 1065, 1148, 1188, 1278, 1285, 1293, 1356, 1363, 1376, 1437, 1444, 1471, 1532, 1624]. **Evolutionary** [561, 652, 712, 940, 1073, 1338]. **Evolvability** [230, 248, 796, 1144]. **Evolving** [90, 352, 448, 509, 537, 802, 1247, 1291]. **EvoSuite** [543]. **exact** [381]. **Examination** [476, 617, 772]. **Examine** [169]. **Examining** [751, 1646, 1659]. **example** [571, 1190, 1446]. **examples** [660]. **Exception** [690, 1163, 1565]. **exceptions** [1598]. **Exchange** [1415]. **Excluding** [1396]. **executable** [864]. **execution** [433, 435]. **executions** [605]. **exhibitionism** [595]. **existing** [1067]. **expansion** [514]. **expenses** [1195]. **Experience** [32, 70, 203, 219, 257, 285, 387, 388, 487, 503, 646, 724, 733, 794, 844, 851, 1115, 1126, 1139, 1171, 1367, 1514]. **Experience-Based** [70, 733]. **Experiences** [51, 255, 287, 303, 340, 497, 745]. **Experiment** [18, 36, 39, 68, 112, 137, 192, 199, 226, 237, 242, 244, 290, 307, 317, 379, 411, 470, 549, 573, 611, 696, 709, 716, 729, 731, 898, 1350, 1390, 1593, 1684, 1724]. **Experimental** [4, 40, 70, 96, 153, 154, 163, 197, 240, 308, 328, 345, 363, 474, 507, 514, 528, 661, 975, 1140, 1510, 1561]. **Experimentation** [118, 228, 618, 1556, 1626]. **Experimenting** [213, 277, 614, 887]. **Experiments** [13, 130, 194, 196, 216, 259, 310, 323, 338, 381, 410, 471, 484, 493, 516, 520, 527, 587, 755, 787, 816, 817, 847, 957, 971, 1102, 1187, 1250, 1266, 1339, 1628]. **Expert** [211, 362, 1478, 1692]. **Expert-based** [1478]. **Expertise** [158]. **experts** [755]. **explain** [421, 495, 1032, 1492]. **explainability** [1673]. **Explainable** [1701]. **explained** [698, 1336]. **Explaining** [1604, 1620]. **Explanation** [98, 1505]. **explanatory** [1381]. **Explicit** [1009, 1265]. **Exploiting** [309]. **Exploration** [214, 720, 1219, 1520]. **Exploratory** [136, 152, 409, 473, 549, 593, 647, 724, 757, 779, 784, 948, 994, 1046, 1050, 1066, 1093, 1132, 1176, 1200, 1216, 1444, 1497, 1711]. **Exploring** [86, 337, 585, 756, 1248, 1358, 1575, 1603, 1647, 1735]. **Exposed** [1117]. **exposure** [1421]. **expression** [1198]. **expressions** [852, 1238]. **Extended** [68, 605, 767, 1031, 1118, 1225, 1698]. **extensible** [1434]. **extension** [1453, 1674]. **extensions** [546]. **extensive** [419, 701, 1634]. **extent** [1164]. **External** [302, 544, 731, 1200, 1446, 1464, 1546, 1575]. **Externally** [192]. **extract** [512, 864, 1563]. **extracted** [334, 1059]. **Extracting** [657, 913, 1364, 1656, 1743]. **extraction** [843, 925, 1086, 1101, 1279, 1565]. **extractions** [992]. **extractor** [692]. **Extreme** [243, 368]. **Eye** [684, 696, 881, 1028, 1156, 1372, 1651].

F [934]. **F-Droid** [934]. **FACE** [290, 1556, 1713, 1736]. **face-to-face** [290]. **FACER** [1190]. **Factor** [176, 563]. **Factors** [119, 122, 187, 470, 516, 608, 783, 839, 877, 1037, 1091, 1219, 1546, 1556]. **failed** [500].

Failure [334, 718, 1005, 1596, 1681, 1700]. **failure-revealing** [1681]. **failures** [279, 721]. **Fairness** [1243, 1544, 1571]. **Fairness-aware** [1544]. **fake** [932]. **false** [1263]. **falsely** [1151]. **families** [957, 1291]. **family** [344, 410, 445, 484, 493, 587, 787, 817, 1030, 1074, 1102, 1250, 1266]. **Far** [1353, 1544, 1686, 1741, 1748]. **fast** [783, 1419, 1536]. **faster** [830]. **fathers** [1632]. **Fault** [30, 64, 79, 83, 154, 167, 180, 186, 188, 312, 351, 356, 359, 409, 414, 427, 551, 560, 744, 863, 959, 1069, 1312, 1315, 1351, 1429]. **Fault-Prone** [30, 64, 79, 167, 351]. **fault-proneness** [409, 1069]. **Fault-Threshold** [180]. **faultload** [1442]. **faults** [265, 475, 543, 607, 809, 1199, 1315]. **faulty** [1573]. **favor** [852]. **fear** [919, 1025]. **feasibility** [850]. **FeatCompare** [1154]. **Feature** [397, 435, 477, 629, 630, 632, 704, 766, 843, 873, 884, 887, 903, 955, 995, 1039, 1059, 1077, 1085, 1094, 1137, 1154, 1291, 1378]. **feature-based** [1378]. **feature-code** [887]. **feature-oriented** [629, 766, 884]. **feature-relevant** [843]. **featured** [1209]. **features** [351, 461, 601, 1059, 1186, 1229, 1506, 1510, 1557]. **federated** [1424]. **Feedback** [216, 654, 944, 1230, 1406, 1468, 1643, 1709, 1728, 1737]. **feedback-directed** [654]. **feet** [1031]. **FENSE** [1378]. **FEVER** [766]. **few** [1654]. **few-shot** [1654]. **fictional** [1041]. **fidelity** [368]. **Field** [224, 279, 395, 601]. **Fifth** [80]. **file** [1354, 1547]. **file-level** [1354, 1547]. **Files** [271, 831, 886, 1026]. **filtering** [351]. **financial** [479, 1562, 1626]. **find** [1308, 1385, 1403]. **Finder** [1583]. **FindICI** [1362]. **Finding** [543, 654, 830, 831, 1147, 1573, 1615, 1691]. **Findings** [222, 714, 841, 1330]. **fine** [247, 692, 1223, 1337, 1709, 1721]. **fine-grained** [247, 692, 1223, 1337, 1709, 1721]. **fine-GRAPE** [692]. **Fingerprint** [973]. **finite** [605]. **Finland** [423]. **Firefox** [786, 900]. **First** [1030, 1113, 1138, 1381, 1424, 1455, 1575]. **first-** [1381]. **fit** [1485]. **fitness** [1233]. **five** [271]. **fix** [331, 598, 675, 708, 997, 1223, 1476, 1546, 1664]. **fix-inducing** [598, 675, 1664]. **fixed** [752, 765]. **Fixer** [1734]. **Fixer-level** [1734]. **fixes** [811, 1097, 1531]. **Fixing** [529, 786, 1173, 1337, 1369, 1376, 1599]. **FIXME** [1332]. **FixMiner** [997]. **flakiness** [1353]. **flaky** [919, 1025, 1452]. **flexibility** [407]. **flexible** [261, 488]. **FLOSS** [428]. **Flow** [439, 734, 1249, 1299]. **flows** [1325]. **flows-aware** [1325]. **fluent}** [1299]. **Fluently** [1299]. **fly** [1548]. **Focus** [204]. **Focused** [237]. **follow** [560]. **food** [1730]. **food-safety** [1730]. **Forecasting** [759, 1644]. **FOREPOST** [654]. **foreshadow** [691]. **Foreword** [626, 723, 842, 1123]. **forget** [1051]. **forgotten** [1184, 1526]. **fork** [668]. **form** [814]. **Formal** [497, 1049, 1343, 1505]. **formation** [1219]. **formatting** [1313]. **formulas** [541]. **FORTRAN** [4]. **forums** [829, 1168]. **forward** [309]. **FOSS** [1040]. **Fostering** [553, 944]. **foundation** [562, 662, 705, 1574, 1695]. **Four** [303, 429, 445, 500, 847, 1445]. **Fragile** [727]. **fragility** [928]. **fragments** [1129, 1392]. **Frame** [110, 845]. **Framework** [52, 75, 269, 295, 325, 510, 556, 566, 681, 759, 839, 976, 980, 1037, 1101, 1239, 1322, 1422, 1489, 1676]. **Frameworks** [1017, 1024, 1093, 1479, 1491, 1493, 1545, 1574]. **Frankenstein** [1536]. **Free** [694, 775, 814, 837, 849, 860, 953, 1327, 1605]. **free-form** [814]. **free/open** [1327]. **frequency** [1463]. **frequently** [619]. **frequently-updated** [619]. **Fresh** [619]. **friction** [1365]. **frugal** [1230]. **fulfillment** [1046]. **Function** [2, 84, 185, 494, 1233, 1354, 1466, 1588, 1705]. **function-level** [1354]. **functional** [240, 898, 941, 1116, 1124, 1290, 1482, 1664]. **functionality** [1687]. **Functions** [502, 1050]. **Fundamental** [24]. **Further** [51, 118, 181].

Fusing [804]. **Future** [92, 282, 1183, 1455]. **fuzzer** [1677]. **fuzzers** [1068]. **Fuzzing** [940, 1349, 1513, 1720]. **Fuzzy** [348, 1700].

gained [286]. **Game** [259, 335, 634, 854, 1011, 1185, 1218, 1322, 1397]. **Game-based** [1218]. **gameplay** [1516]. **games** [713, 762, 1516]. **Gamification** [944, 1014, 1236]. **gap** [1552, 1661]. **gaps** [915]. **gate** [241]. **gatekeepers** [1295]. **GBGallery** [1322]. **GCC** [271]. **Gender** [905, 1237, 1472, 1530, 1552, 1575]. **General** [410, 425, 780, 817, 1026]. **general-purpose** [410, 817]. **generalist** [1694]. **generate** [1660]. **generated** [1140, 1607, 1625, 1703, 1723]. **Generating** [679, 1072, 1129, 1214, 1233, 1526, 1573]. **Generation** [240, 260, 266, 375, 547, 677, 744, 794, 850, 896, 1004, 1119, 1134, 1174, 1293, 1342, 1381, 1416, 1459, 1521, 1536, 1582, 1590, 1743]. **generator** [1298]. **generators** [1662]. **generic** [400]. **generics** [458]. **Genetic** [679, 744, 825, 1137]. **genetically** [1356]. **genetically-based** [1356]. **Getting** [141, 387, 820]. **Gin** [1484]. **Git** [588, 968, 1346]. **git2net** [1120]. **GitHub** [638, 668, 699, 743, 793, 885, 886, 893, 894, 946, 948, 958, 1021, 1195, 1216, 1246, 1294, 1330, 1387, 1463, 1503, 1509, 1511, 1518, 1523, 1558, 1595, 1611, 1641, 1647, 1704]. **Gitter** [1231]. **Global** [272, 287, 349, 353, 466, 487, 610, 643, 707, 1030, 1487]. **globally** [533]. **Gnome** [491]. **Go** [1353]. **goal** [266, 508, 1561]. **goal-oriented** [266]. **goals** [347]. **Going** [963]. **good** [944]. **Google** [619, 775, 873, 1117, 1138, 1237, 1666]. **Governing** [1699]. **GPGPU** [443]. **GQM** [29, 552]. **grained** [247, 692, 1223, 1337, 1709, 1721]. **grammar** [306, 679]. **grammar-based** [306, 679]. **grammars** [679]. **grammatical** [1293]. **granular** [1547, 1590]. **GRAPE** [692]. **Graph** [58, 164, 1134, 1398, 1467, 1536, 1603, 1669]. **graph-based** [1467, 1669]. **Graphical** [317, 737, 1047, 1048, 1300]. **graphics** [443]. **graphs** [1175, 1245, 1271]. **great** [956]. **Green** [535, 1170]. **greener** [1537]. **GreenHub** [1106]. **GreenScaler** [896]. **grey** [348, 1677]. **grey-box** [1677]. **Greybox** [1349]. **ground** [1520]. **grounded** [388, 421, 1061, 1481, 1586]. **Group** [155, 207, 218, 711, 1463]. **grouping** [1636]. **Growth** [165, 168, 267, 1232]. **Guest** [21, 315, 329, 358, 451, 506, 532, 536, 589, 602, 637, 649, 676, 686, 695, 718, 764, 890, 926, 929, 979, 984, 999, 1538]. **GUI** [274, 545, 735, 928, 1589, 1631]. **GUI-based** [1631]. **Guidance** [39]. **guide** [527, 1028, 1638]. **guided** [1521, 1746]. **guideline** [733]. **Guidelines** [112, 292, 327, 618, 954, 1270, 1346, 1626, 1666]. **Guiding** [333, 1007]. **Guttman** [56].

hackathon [1373]. **hackathons** [792]. **hackers** [857]. **hairy** [1189]. **Handling** [690, 1163, 1333, 1338]. **happened** [1182]. **happens** [1275]. **hard** [823]. **harder** [708]. **hardware** [1480]. **hardware/software** [1480]. **harmful** [319, 554]. **Harnessing** [1694]. **hazards** [690]. **HAZOP** [526]. **HAZOP-based** [526]. **HCI** [657]. **health** [1340, 1382]. **hell** [447]. **help** [253, 819, 976, 1601]. **Helping** [1082]. **Heritage** [1527]. **heuristic** [374]. **heuristics** [291, 574, 650, 729]. **hiding** [1165]. **Hierarchical** [1515]. **hierarchy** [1716]. **High** [502, 543, 598, 675, 716, 895, 1372]. **High-level** [895]. **High-MCC** [502]. **high-performance** [716]. **high-speed** [1372]. **higher** [240, 484, 1050]. **higher-order** [1050]. **higher-ordered-typed-functional** [240]. **highlighting** [819]. **highly** [766, 1227, 1329, 1488]. **highly-configurable** [1329]. **hill** [507]. **hinders** [1173]. **Hints** [116, 811]. **historical** [986, 1371]. **history**

[246, 606, 693, 807, 1007, 1729]. **hoc** [655, 1053]. **Hold** [1043, 1111, 1728]. **home** [1433]. **homogeneous** [250, 1225]. **homophily** [664]. **honesty** [1514]. **hosting** [771]. **hotspots** [393]. **hub** [1713]. **hugging** [1713, 1736]. **Human** [98, 204, 407, 527, 846, 877, 1367, 1447]. **human-centric** [407]. **Humans** [225, 1023, 1509, 1572]. **hundreds** [1105]. **hunters** [1114]. **Hunting** [1585]. **hurdles** [834]. **hurried** [540]. **Hybrid** [849, 1004, 1298, 1307]. **hyper** [1174]. **hyper-parameter** [1174]. **Hyperfuzzing** [1677]. **Hypermedia** [73, 182]. **hyperparameter** [927, 1340]. **HyperPUT** [1573]. **hypertesting** [1677].

IAST [1725]. **ICC** [923]. **ICSM** [245]. **ICSME** [1437]. **ICT** [1632]. **ID** [1073]. **ID-correspondence** [1073]. **Identification** [30, 523, 526, 556, 853, 1098, 1182, 1284, 1445, 1621, 1650, 1686, 1741]. **identifier** [275, 434, 515, 597, 862]. **identifiers** [514, 1487]. **identify** [729, 977, 1171]. **Identifying** [217, 269, 635, 714, 754, 910, 1043, 1111, 1124, 1220, 1331, 1585]. **identity** [973]. **idioms** [858]. **IEEE** [1437]. **if** [1625]. **if-statements** [1625]. **illustrative** [1302]. **image** [1164, 1620]. **images** [1090]. **imbalance** [1429]. **imbalanced** [732]. **Immediate** [195]. **Impact** [3, 27, 36, 103, 109, 155, 203, 219, 226, 228, 238, 304, 321, 328, 409, 434, 437, 440, 454, 455, 490, 504, 534, 556, 590, 598, 607, 610, 611, 641, 656, 670, 675, 717, 747, 760, 765, 773, 779, 787, 796, 807, 877, 903, 914, 974, 1003, 1039, 1082, 1151, 1205, 1261, 1278, 1296, 1381, 1386, 1390, 1396, 1429, 1461, 1477, 1511, 1512, 1567, 1614, 1630, 1680, 1722, 1747]. **impacting** [470]. **Impacts** [205]. **imperfect** [556]. **implement** [1663]. **Implementation** [56, 169, 366, 967]. **implementations** [407, 1525]. **Implications** [147]. **implied** [714]. **Importance** [173, 507, 538, 678, 1609]. **importance-aware** [1609]. **important** [823]. **Improve** [414, 435, 445, 447, 453, 672, 768, 785, 1171, 1230, 1259, 1265, 1290, 1410, 1467, 1591, 1679]. **Improved** [160, 309, 512, 825]. **Improvement** [25, 91, 119, 136, 157, 173, 175, 195, 303, 443, 818, 1479]. **improvements** [374, 722]. **Improving** [350, 533, 591, 650, 909, 915, 950, 1014, 1128, 1130, 1480]. **imputation** [250, 1436]. **in-depth** [638, 691, 1142, 1739]. **inactivity** [1246]. **incentives** [1626]. **incidence** [1032]. **incidents** [1271]. **inconsistencies** [341, 1003, 1362]. **inconsistency** [597, 688, 831, 948]. **inconsistent** [1686, 1741]. **Incorporating** [497, 1401]. **incorrect** [747]. **Increased** [19]. **Increasing** [10, 28]. **Incremental** [370, 912, 1254]. **Indentation** [1625]. **indented** [1625]. **independent** [475, 987]. **indicators** [1318, 1340, 1644]. **indirect** [1080]. **Individual** [103, 113, 201, 226, 237, 440, 470, 528, 711, 944, 1160]. **indolent** [1166]. **induced** [1672]. **inducing** [598, 675, 822, 995, 1124, 1151, 1557, 1664]. **Industrial** [169, 195, 205, 257, 271, 280, 303, 318, 382, 383, 425, 429, 479, 485, 497, 580, 593, 594, 625, 627, 646, 701, 735, 834, 844, 865, 944, 1030, 1038, 1139, 1160, 1171, 1194, 1224, 1263, 1278, 1409, 1420, 1474, 1621]. **Industry** [249, 496, 731, 794, 906, 991, 1144, 1169, 1644]. **industry-academia** [1644]. **industry-relevant** [906]. **inequities** [1552]. **infections** [1569]. **Inference** [449, 776, 1277, 1588, 1624, 1684, 1711]. **inferences** [1164]. **Inferring** [518, 605, 1475]. **Influence** [113, 129, 230, 384, 474, 525, 664, 738, 884]. **influences** [1710]. **influencing** [608, 1037]. **Information** [12, 150, 230, 272, 286, 320–322, 324, 397, 414, 435, 505, 511, 520, 523, 583, 646, 717, 763, 843, 846, 887, 950, 1004, 1088, 1109, 1152, 1214, 1325, 1466, 1550, 1622, 1657]. **information-push** [1088]. **information-seeking** [272].

Infrastructure [228, 1035, 1362]. **infrastructure-as-code** [1362]. **ingredients** [1178]. **inheritance** [8]. **inhibitors** [617]. **Initial** [55, 153, 715]. **initiation** [562]. **initiative** [879]. **Injecting** [1199]. **injection** [900]. **injections** [942, 943]. **inline** [1577]. **inlining** [1705]. **inner** [1238]. **InnerSource** [1697]. **innovation** [389, 600, 748]. **Input** [252, 479, 785]. **inputs** [679, 1681, 1743]. **Inquiry** [396]. **Insights** [423, 627, 1038, 1543]. **insourcing** [500]. **Inspection** [18, 50, 62, 74, 165, 169, 253, 655, 1140]. **Inspections** [68–70, 96, 124, 188, 203, 470]. **inspired** [1670]. **instances** [1669]. **instilling** [1084]. **Instrument** [12, 108, 119, 552]. **integrated** [817]. **Integrating** [241, 347, 435, 454, 1447]. **Integration** [452, 609, 681, 744, 752, 765, 908, 948, 972, 1008, 1244, 1329, 1477, 1524, 1601, 1636, 1707]. **intelligence** [1364]. **intelligent** [1676]. **intend** [1410]. **Intensifying** [1374]. **intensive** [423, 745, 1300, 1426, 1635]. **intentions** [1152]. **Inter** [553, 1235]. **Inter-team** [553, 1235]. **interaction** [374, 630, 760, 772, 776, 1150, 1372, 1638, 1689]. **interactions** [437, 562, 1354]. **interactive** [1312, 1400, 1431, 1725, 1731]. **Interface** [98, 113, 128, 1480, 1534]. **interfaces** [522]. **Internal** [57, 294, 486]. **International** [23, 80, 131, 161, 1437]. **interplay** [788]. **interpretability** [872, 1441]. **Interpretable** [160]. **interpretation** [1039, 1702]. **interpreters** [1399]. **Interrater** [77]. **interview** [1423, 1673]. **introduced** [977]. **Introducing** [255, 913, 1509]. **Introduction** [21, 72, 80, 83, 99, 315, 329, 371, 412, 417, 442, 457, 558, 806, 859, 1093, 1448]. **intrusion** [1215]. **intuitive** [1561]. **invalid** [1621]. **investigate** [692]. **Investigated** [130]. **Investigating** [56, 122, 223, 243, 378, 484, 608, 672, 856, 989, 1069, 1246, 1295, 1500, 1503, 1616, 1643]. **Investigation** [9, 63, 100, 160, 173, 181, 183, 217, 253, 270, 328, 352, 366, 444, 470, 514, 528, 677, 773, 865, 897, 962, 1024, 1058, 1100, 1188, 1241, 1275, 1363, 1411, 1446, 1469, 1501, 1528, 1541, 1642, 1648, 1708]. **Investigations** [163]. **invisible** [1645]. **Involvement** [525, 720, 1357]. **Involving** [61]. **iOS** [837, 849, 936]. **IoT** [1179, 1239, 1325]. **iPerfDetector** [936]. **IR** [323, 1184, 1224, 1230]. **IR-based** [323, 1184, 1224, 1230]. **IRJIT** [1622]. **ISBSG** [289]. **ISESE** [161]. **Issue** [6, 11, 15, 20, 37, 43, 48, 53, 60, 66, 72, 76, 80, 85, 94, 95, 101, 115, 120, 126, 132, 151, 156, 162, 166, 174, 179, 184, 189, 193, 198, 210, 215, 221, 227, 233, 239, 245, 251, 258, 263, 268, 273, 278, 283, 288, 293, 300, 305, 310, 315, 320, 329, 358, 371, 399, 412, 417, 432, 442, 457, 501, 558, 626, 757, 799, 806, 813, 821, 842, 855, 859, 870, 904, 913, 929, 984, 1002, 1038, 1095, 1114, 1123, 1207, 1221, 1326, 1331, 1359, 1437, 1448, 1496, 1538, 1572, 1685]. **issue-link** [1326]. **Issues** [127, 141, 144, 173, 197, 612, 635, 689, 708, 752, 765, 833, 983, 1018, 1062, 1104, 1183, 1197, 1260, 1377, 1483, 1516, 1518, 1579, 1611, 1640, 1641]. **item** [1733]. **iteration** [895]. **iterative** [1306].

Jankowski [98]. **Java** [270, 276, 420, 458, 567, 595, 620, 662, 709, 797, 801, 803, 809, 891, 892, 913, 925, 965, 992, 1166, 1170, 1175, 1238, 1274, 1393, 1434, 1444, 1488, 1525, 1553, 1565, 1581, 1618, 1676, 1725]. **Java-based** [662, 913, 1725]. **JavaScript** [596, 839, 1105, 1175, 1379, 1513]. **JDK** [801]. **JEMMA** [1434]. **JHipster** [869]. **JIT** [1151, 1417]. **job** [1236]. **Jorgensen** [171]. **Journal** [879, 1213, 1655, 1696, 1717, 1718]. **journey** [1616]. **joys** [1286]. **judgment** [362]. **Julia** [1473, 1714]. **JUnit** [235]. **Jupyter** [1130]. **Just** [639, 706, 813, 914, 917, 1263, 1378, 1501, 1504, 1587, 1622, 1642, 1649, 1692]. **Just-in-Time**

[639, 706, 813, 914, 917, 1378, 1501, 1504, 1587, 1622, 1642, 1649, 1692].

Kanban [577]. **Kappa** [77]. **Kemerer** [214]. **Keras** [1545]. **Kernel** [426, 428, 502, 1309]. **Key** [119, 294]. **kind** [1006]. **kinds** [1522]. **know** [620, 1371]. **Knowledge** [28, 135, 172, 197, 298, 553, 632, 656, 663, 697, 767, 902, 1054, 1253, 1271, 1312, 1470, 1568, 1687, 1692]. **Knowledge-Sharing** [197]. **known** [953]. **Kotlin** [933, 1711].

L [170, 171]. **label** [1155]. **Labeling** [505, 1284]. **labelling** [612, 1547]. **labels** [1496]. **lag** [1090]. **Lags** [1097]. **lambda** [852, 1238]. **lambdification** [1166]. **lands** [998]. **landscape** [260]. **landscapes** [1484]. **Language** [105, 716, 770, 808, 843, 901, 933, 1116, 1210, 1264, 1282, 1287, 1288, 1334, 1360, 1362, 1482, 1558, 1597, 1650, 1658, 1661, 1701, 1703, 1706, 1723, 1727, 1736]. **languages** [410, 461, 817, 1192, 1303, 1405, 1568]. **Large** [28, 255, 330, 332, 351, 354, 393, 509, 567, 568, 570, 599, 615, 625, 646, 681, 687, 688, 699, 709, 734, 756, 773, 812, 840, 894, 913, 992, 1079, 1106, 1147, 1224, 1235, 1240, 1262, 1292, 1342, 1344, 1381, 1431, 1469, 1494, 1562, 1566, 1619, 1650, 1658, 1697, 1699, 1701, 1703, 1706, 1723, 1725, 1727]. **Large-Scale** [28, 351, 570, 599, 646, 687, 699, 709, 734, 756, 812, 894, 913, 1106, 1147, 1224, 1235, 1240, 1342, 1381, 1431, 1469, 1494, 1566, 1699, 1703]. **last** [698]. **latency** [1336]. **latent** [477]. **later** [1370]. **Laws** [24]. **layer** [938]. **Layout** [164]. **Lead** [109]. **Lead-Time** [109]. **leaders** [1012]. **leadership** [1103]. **leading** [839]. **leak** [965]. **leakage** [1325, 1614]. **leaks** [935]. **leanness** [577]. **learn** [550]. **Learned** [33, 49, 355, 1489, 1693]. **learners** [830]. **Learning** [131, 148, 192, 253, 395, 480, 487, 510, 548, 555, 586, 614, 625, 654, 660, 789, 866, 954, 973, 1007, 1013, 1017, 1036, 1074, 1080, 1092, 1093, 1095, 1121, 1139, 1161, 1196, 1204, 1214, 1226, 1233, 1234, 1242, 1243, 1273, 1280, 1284, 1285, 1311, 1313, 1325, 1329, 1331, 1345, 1350, 1351, 1362, 1368, 1371, 1403, 1408, 1414, 1418, 1424, 1440, 1442, 1451, 1452, 1454, 1456, 1457, 1462, 1491, 1501, 1521, 1544, 1545, 1549, 1557, 1579, 1582, 1588, 1593, 1596, 1598, 1602, 1604, 1621, 1627, 1630, 1633, 1640, 1642, 1648, 1654, 1656, 1660, 1661, 1669, 1674, 1678, 1686, 1708, 1726, 1734, 1741, 1744, 1745]. **learning** [909, 1692, 1721]. **learning-based** [586, 1329, 1350, 1442, 1451, 1549, 1602, 1630]. **learning-related** [1598]. **learning-to-rank** [909]. **Learnt** [1121]. **least** [365]. **led** [1695]. **legacy** [736, 1220]. **legal** [1101]. **Length** [105, 807]. **lenient** [1080]. **lens** [1424, 1461]. **less** [1333]. **Lessons** [33, 49, 355, 1121]. **Level** [56, 230, 330, 587, 655, 671, 702, 895, 1273, 1276, 1354, 1410, 1453, 1547, 1614, 1649, 1734]. **leverage** [1519]. **Leveraging** [1054, 1154, 1392]. **lexical** [583, 1003, 1004]. **libraries** [882, 1163, 1274, 1395, 1661]. **library** [559, 753, 967, 1443]. **License** [688, 699, 1527]. **licensing** [856, 1105]. **life** [313, 771, 918, 1148]. **life-cycle** [918]. **Lifecycle** [113, 708, 1092, 1153]. **Lightweight** [1019, 1086, 1536, 1565, 1707]. **Like** [84, 778, 1660]. **Likelihood** [81, 136]. **Likert** [250]. **limit** [1160]. **Limitations** [545, 1603]. **limited** [440]. **Limits** [127]. **Line** [39, 483, 593, 626, 698, 744, 924, 1079, 1241, 1254, 1279, 1374, 1420, 1637]. **line-oriented** [924]. **Linear** [180, 342, 825]. **lines** [4, 627–629, 736, 954, 1042, 1072, 1074, 1100, 1247, 1264, 1282]. **Linguistic** [244, 411, 573, 584, 1362]. **Link** [435, 544, 572, 684, 1182, 1326, 1483]. **Linking** [61, 829]. **links** [682, 802, 1152, 1200, 1214, 1255, 1471, 1561]. **Linux** [264, 428, 502, 588, 782, 1309, 1328, 1427]. **lists** [767]. **literature** [369, 530, 544, 557, 564, 578, 733, 784, 830, 1146, 1228, 1242, 1244, 1256, 1366, 1388, 1457, 1586, 1637, 1690, 1735]. **lived** [876]. **LLM** [1730]. **LLM-based**

[1730]. **load** [1003, 1265]. **Local** [707, 1443, 1528]. **Localization** [154, 488, 551, 560, 717, 744, 774, 804, 863, 920, 937, 985, 995, 1003, 1027, 1109, 1184, 1224, 1269, 1312, 1315, 1354, 1634]. **localizing** [831]. **locally** [533]. **locate** [601, 822]. **located** [1235]. **locating** [265]. **Location** [324, 406, 435, 477, 572, 955, 1059]. **locations** [960]. **Log** [415, 702, 706, 729, 833, 1007, 1026, 1386, 1517, 1596, 1614, 1630]. **Log-based** [1386, 1517, 1596]. **log-related** [833]. **Log4Perf** [960]. **Logging** [524, 662, 702, 751, 779, 815, 913, 934, 960, 1281, 1309]. **logic** [482, 1157]. **logical** [454, 650]. **Logistic** [231]. **Logs** [200, 334, 550, 1067, 1070, 1150, 1277, 1423]. **long** [735, 908]. **long-term** [735]. **longer** [862]. **longitudinal** [386, 1065, 1133, 1160, 1381, 1494, 1617]. **look** [1113, 1138, 1424]. **loop** [1041]. **lots** [1394]. **low** [1384]. **LSEbA** [365]. **LSO'01** [131].

M. [171]. **Machine** [480, 510, 555, 582, 586, 605, 610, 614, 625, 866, 937, 954, 1013, 1055, 1121, 1139, 1161, 1226, 1242, 1243, 1325, 1331, 1345, 1351, 1362, 1408, 1414, 1418, 1440, 1442, 1451, 1452, 1454, 1544, 1549, 1557, 1579, 1593, 1598, 1604, 1621, 1627, 1640, 1661, 1668]. **machines** [1176]. **Macro** [330]. **Macro-level** [330]. **mailing** [767]. **maintain** [1742]. **Maintainability** [8, 31, 40, 199, 281, 504, 519, 587, 773, 787, 1173]. **maintaining** [537]. **Maintenance** [22–25, 29, 34–36, 65, 159, 191, 212, 346, 495, 536, 558, 559, 570, 574, 738, 799, 834, 916, 1127, 1148, 1183, 1304, 1437, 1450, 1481, 1555]. **Maintenance-related** [1183]. **major** [721]. **make** [539, 740, 1061, 1164, 1498, 1594, 1605]. **make-based** [740]. **makes** [1076, 1419, 1541]. **making** [336, 565, 1317, 1571]. **malicious** [774, 1428]. **Malware** [586, 774, 1113, 1121, 1203, 1402, 1510]. **manage** [945, 1081]. **managed** [241]. **Management** [30, 172, 177, 192, 353, 510, 531, 585, 591, 991, 1092, 1141, 1297, 1328, 1427, 1480, 1593, 1613, 1643, 1729, 1735]. **managers** [521, 539, 1401]. **Managing** [496, 734]. **mandatory** [729]. **Manipulation** [806, 922]. **manual** [270, 809, 1631]. **manuals** [843]. **many** [311, 651, 652, 963, 1084, 1220]. **many-objective** [651, 652, 963, 1220]. **map** [820]. **Mapping** [478, 511, 525, 600, 736, 1059, 1149, 1456, 1495]. **marine** [716]. **market** [244]. **market-driven** [244]. **master** [1075]. **Mastering** [1413]. **matching** [828, 1589]. **matter** [1142, 1455, 1542]. **Matters** [139, 596, 620, 1345]. **mature** [840]. **Maturity** [56, 57, 294, 1352]. **Maven** [1099, 1261]. **Maximising** [286]. **MCC** [502]. **Me** [1292]. **means** [679, 1629]. **Measure** [84, 281, 1073, 1355]. **measure-based** [281]. **Measurement** [5, 14, 41, 42, 52, 108, 135, 176, 191, 302, 335, 931, 1538]. **Measurements** [129]. **measures** [321, 453, 544, 738, 1032]. **Measuring** [12, 119, 368, 503, 971, 1003, 1071, 1143, 1304, 1702]. **Mechanism** [220]. **mechanisms** [1494]. **mediated** [422]. **mediating** [1236]. **Medium** [172, 496]. **Medium-Sized** [172]. **meet** [1152]. **Meeting** [50]. **Meetings** [129, 290, 610]. **member** [1357, 1463]. **Members** [121]. **Memory** [406, 603, 899, 965, 1492, 1566]. **mental** [1382]. **merge** [797, 918, 958, 962, 1407, 1559]. **merged** [835, 1477]. **mesh** [1493]. **Meshing** [970]. **message** [1342]. **messages** [1471]. **Meta** [44, 374, 408, 957, 1628]. **meta-analysing** [1628]. **Meta-analysis** [408, 957]. **Meta-Analysts** [44]. **meta-heuristic** [374]. **metadata** [1101, 1364, 1406]. **metamodels** [805, 1558]. **Metaphor** [225]. **Method** [70, 160, 168, 217, 261, 267, 284, 291, 301, 383, 389, 488, 512, 595, 644, 756, 992, 1140, 1276, 1319, 1381, 1467, 1563, 1676, 1686, 1741]. **Methodological** [98, 113]. **Methodologies** [10, 23, 93, 180]. **Methodology** [17, 226, 238, 386, 464, 535, 627, 1372, 1485].

Methods [68, 69, 92, 103, 336, 350, 356, 426, 431, 505, 568, 669, 780, 803, 883, 887, 1049, 1288, 1417, 1444, 1565, 1567, 1593, 1654, 1739]. **Metric** [406, 661, 700, 726, 987, 1410]. **Metric-based** [700]. **Metrics** [63, 80–82, 86, 214, 245, 376, 398, 408, 824, 1012, 1162, 1262, 1304, 1310, 1351, 1355, 1358, 1560]. **metrics-based** [1560]. **mHealth** [1344]. **micro** [1552, 1639]. **micro-inequities** [1552]. **microbenchmarks** [1167]. **microservice** [1194, 1724]. **Microservices** [1132, 1144, 1220, 1232, 1465, 1656, 1697]. **microtasking** [1390]. **middleware** [407]. **migrating** [1658]. **migration** [745, 1432, 1465]. **million** [1471]. **Mimicking** [1023]. **Mind** [1136, 1552]. **mindset** [750]. **mindsets** [1177]. **Minecraft** [1034]. **minefield** [575]. **minimisation** [443]. **minimizing** [1284]. **Mining** [329, 382, 412, 415, 417, 457, 529, 532, 535, 550, 588, 589, 606, 633, 637, 638, 686, 754, 764, 769, 807, 818, 836, 882, 890, 941, 997, 999, 1001, 1050, 1055, 1067, 1087, 1202, 1205, 1210, 1211, 1223, 1271, 1298, 1543, 1598]. **mis** [1020]. **Misclassification** [117]. **mismatch** [685, 828]. **Missingness** [220]. **misunderstanding** [897]. **mitigate** [915]. **mitigating** [717, 1652]. **mitigation** [1029, 1747]. **Mixed** [1567, 1593]. **Mixed-Methods** [1567, 1593]. **Mixing** [145]. **ML** [1522, 1673]. **ML4Code** [1434]. **MLASP** [1139, 1161]. **MND** [469]. **MND-SCEMP** [469]. **Mobile** [612, 615, 619, 667, 739, 748, 865, 866, 904, 911, 929–931, 934, 989, 1024, 1154, 1283, 1514, 1537, 1566, 1587]. **Mock** [891]. **mocking** [1574]. **modal** [1506, 1582]. **Model** [64, 165, 205, 294, 299, 357, 365, 429, 439, 449, 450, 464, 508, 519, 530, 555, 576, 630, 632, 640, 671, 737, 787, 800, 878, 895, 977, 1083, 1137, 1140, 1176, 1259, 1273, 1277, 1300, 1302, 1303, 1352, 1364, 1380, 1405, 1422, 1431, 1441, 1453, 1483, 1495, 1551, 1633, 1658, 1701, 1702, 1704, 1716, 1736]. **Model-based** [576, 1300, 1380, 1441]. **Model-driven** [429, 519, 787, 1176, 1701]. **Modeling** [71, 86, 150, 186, 326, 356, 469, 490, 503, 528, 533, 664, 1085, 1092, 1180, 1232, 1354, 1378, 1551]. **Modelling** [47, 136, 153, 160, 363, 540, 975, 1360, 1529]. **Models** [89, 117, 123, 168, 182, 206, 213, 230, 242, 267, 281, 289, 311, 312, 341, 400–403, 427, 438, 468, 529, 590, 605, 618, 631, 633, 639, 704, 707, 710, 804, 815, 816, 841, 863, 874, 896, 903, 917, 926, 950, 984, 1039, 1055, 1063, 1074, 1151, 1153, 1164, 1193, 1250, 1300, 1342, 1358, 1369, 1418, 1420, 1429, 1452, 1468, 1475, 1501, 1561, 1596, 1604, 1614, 1642, 1646, 1650, 1659, 1660, 1683, 1687, 1703, 1704, 1706, 1723, 1724, 1727]. **moderating** [1740]. **Modern** [372, 608, 641, 673, 877, 1058, 1152, 1335, 1462]. **modification** [1484]. **modifications** [247, 1011, 1165]. **mods** [1034]. **modular** [873]. **modularization** [453]. **module** [351]. **Modules** [30, 64, 79, 167]. **Monitoring** [19, 960]. **monolithic** [391, 1656]. **months** [1286]. **Morasca** [41]. **most** [820]. **Motivating** [1357]. **motivation** [1740]. **motivations** [982, 1396]. **Motivators** [157]. **movements** [684]. **moving** [370, 672]. **MRE** [181]. **MSR** [1031]. **MSRBot** [993]. **Much** [1478]. **Multi** [372, 542, 563, 678, 704, 774, 804, 860, 942, 943, 1045, 1083, 1090, 1105, 1155, 1172, 1273, 1287, 1288, 1318, 1422, 1475, 1495, 1506, 1521, 1524, 1547, 1564, 1584, 1597, 1648, 1708]. **multi-abstraction** [804]. **multi-case** [1083, 1495, 1524]. **multi-component** [1172]. **multi-container** [1584]. **multi-criteria** [372]. **multi-dimensional** [1090]. **multi-factor** [563]. **Multi-granular** [1547]. **multi-label** [1155]. **Multi-language** [1287, 1288, 1597]. **multi-licensing** [1105]. **multi-modal** [1506]. **multi-model** [1422]. **Multi-objective** [542, 678, 704, 1318, 1475, 1564]. **multi-revision** [860]. **multi-scale** [1506]. **multi-task** [1273, 1521, 1648, 1708]. **Multi-variate** [1045]. **multi-view** [774].

multi-vulnerability [942, 943]. **Multidimensional** [157]. **Multidisciplinary** [125]. **multilingual** [610]. **multiple** [244, 377, 393, 411, 912, 1036, 1081, 1218]. **multiple-component** [393]. **multiplicative** [357]. **mutants** [959, 1289, 1380]. **Mutation** [128, 333, 547, 809, 1068, 1140, 1330, 1380, 1554, 1721]. **mutation-based** [547]. **mutations** [1069]. **my** [982, 1275, 1728]. **Mylyn** [760].

name [1676]. **names** [862, 1488, 1686, 1741]. **Naming** [460, 719]. **narrative** [571]. **NASA** [10, 34]. **native** [1319]. **natural** [808, 843, 901, 1116, 1210, 1362]. **nature** [596, 1112]. **navigation** [1638, 1655, 1696, 1717, 1718]. **nearest** [250]. **Need** [50, 794, 808, 1056, 1057, 1153, 1251, 1308, 1460, 1522]. **needed** [473, 635, 949]. **Needs** [145, 520, 522, 1058, 1152, 1550]. **Negative** [723, 725, 728]. **Negativity** [1710]. **negotiations** [422]. **neighbour** [250]. **Nets** [313]. **Network** [425, 439, 663, 712, 861, 937, 1135, 1215, 1234, 1285, 1347, 1349, 1609]. **Networks** [467, 509, 1120, 1158, 1296, 1301, 1321, 1424, 1603, 1676]. **Neural** [425, 937, 1134, 1158, 1321, 1347, 1424, 1603, 1609, 1676]. **Neuron** [1609]. **neuroplasticity** [1266]. **Newcomer** [1294]. **next** [373]. **NFR** [1524]. **nine** [574]. **NLP** [844]. **Noise** [760]. **noisy** [1371]. **Nokia** [114]. **Non** [46, 169, 211, 342, 381, 608, 803, 941, 1124, 1201, 1290, 1292, 1530, 1625]. **non-cloned** [803]. **non-coding** [1201]. **non-DevOps** [1530]. **non-exact** [381]. **non-functional** [941, 1124, 1290]. **non-indented** [1625]. **non-linear** [342]. **Non-Programmers** [46]. **Non-reproducible** [1292]. **Non-Technical** [211, 608]. **Non-Traditional** [169]. **Nopol** [850]. **Nordic** [1524]. **North** [1049]. **Norwegian** [249]. **Note** [220, 799, 821, 916, 922, 988, 1025]. **notebook** [1438]. **notebooks** [1130, 1627]. **notes** [613, 1595]. **novel** [650, 927, 1360]. **Novice** [1294, 1461, 1616]. **novices** [253, 784, 819, 1156]. **npm** [974, 1082, 1097, 1159, 1296, 1464]. **number** [311, 682]. **numbers** [271].

obfuscation [493, 567]. **Object** [8, 40, 52, 63, 84, 92, 122, 137, 158, 163, 185, 214, 269, 376, 397, 408, 486, 544, 546, 852, 1645]. **Object-Oriented** [8, 40, 52, 63, 84, 92, 122, 137, 158, 163, 185, 214, 269, 397, 408, 486, 544, 546, 852]. **objective** [373, 542, 651, 652, 678, 704, 963, 1220, 1221, 1318, 1475, 1564]. **objectives** [1044]. **objects** [891]. **Obligations** [95]. **observability** [1194]. **observational** [253, 924, 1415]. **observer** [369]. **obstacles** [395]. **obtain** [961]. **Occurrence** [183]. **OCL** [650, 894, 975]. **off** [863, 872, 1118, 1373]. **off-the-shelf** [1118]. **offensive** [1662]. **Offline** [1158, 1321, 1501, 1642]. **offloading** [1520]. **offs** [1520]. **offshore** [500]. **ointment** [1548]. **Ok** [1689]. **Older** [792]. **Omni** [1193]. **On-Hold** [1043, 1111]. **On-Line** [39]. **onboarding** [1088]. **One** [1105, 1341, 1373, 1591]. **One-off** [1373]. **Online** [829, 927, 1071, 1158, 1321, 1403, 1501, 1616, 1622, 1642, 1649, 1674]. **only** [711]. **ontological** [632]. **Open** [133, 140, 200, 337, 366, 382, 430, 456, 459, 513, 594, 599, 600, 609, 617, 662, 665, 687, 688, 694, 748, 754, 757, 797, 832, 856, 879, 888, 894, 897, 913, 928, 1029, 1044, 1046, 1065, 1087, 1114, 1136, 1163, 1169, 1195, 1201, 1215, 1272, 1279, 1327, 1340, 1446, 1472, 1530, 1579, 1605, 1661, 1695, 1712, 1729, 1736, 1738]. **Open-Source** [200, 594, 687, 797, 888, 894, 897, 928, 1046, 1136, 1163, 1169, 1279, 1530, 1579]. **open-sourcing** [832]. **OpenDev** [1541]. **opened** [456]. **OpenStack** [1152, 1335, 1600]. **Operating** [1576]. **operation** [284, 574]. **operational** [361]. **operationalising** [552]. **operationalization** [1366].

Operationalizing [1533]. **operations** [650]. **operators** [825, 1374, 1721]. **opinions** [722]. **OPM** [213]. **opportunistic** [1190]. **opportunities** [394, 678, 1171]. **opportunity** [1402]. **Optimal** [963, 1320]. **Optimisation** [372, 1307]. **Optimising** [574]. **Optimistic** [211]. **Optimization** [266, 398, 542, 658, 963, 1045, 1220, 1340, 1374, 1681, 1705]. **optimizations** [1441]. **optimizers** [1001]. **optimizing** [914]. **OpTrans** [1705]. **oracle** [863]. **orchestration** [1584]. **order** [1050, 1056, 1057]. **ordered** [240]. **Ordering** [79, 899]. **Ordinary** [146]. **organic** [1100]. **organization** [1084]. **Organizational** [173, 205, 715, 1147]. **Organizations** [35, 131, 523, 1481]. **Organize** [38]. **organized** [1738]. **organizing** [421]. **Oriented** [8, 40, 52, 63, 84, 92, 122, 137, 158, 163, 185, 214, 266, 269, 376, 397, 408, 448, 486, 544, 546, 629, 664, 766, 852, 884, 924, 1005, 1045, 1726]. **Original** [1575]. **OS-specific** [1663]. **OSS** [389, 562, 664, 828, 1246, 1294, 1458]. **OSS-Candidates** [1294]. **other** [778]. **Our** [28]. **outcomes** [747, 1458, 1472]. **outdated** [1540]. **outlier** [446]. **Output** [17, 560]. **outsourcing** [500, 1219]. **overcome** [253]. **Overfitting** [123, 826, 850]. **overflow** [481, 615, 663, 767, 868, 885, 905, 952, 983, 1006, 1127, 1129, 1179, 1200, 1208, 1211, 1260, 1314, 1389, 1392, 1582, 1598, 1611, 1683]. **overhead** [1024]. **overlooked** [1715]. **Overview** [55, 1297, 1336]. **owner** [568]. **ownership** [416, 1646, 1659, 1699]. **Oz** [998].

package [1301, 1481, 1661]. **package-based** [1301]. **packages** [974, 1082, 1159, 1439, 1486]. **packaging** [861]. **pain** [719]. **Pair** [208, 259, 328, 484, 1575]. **Pair-wise** [259]. **pairs** [406, 1127, 1488]. **Pal** [1689]. **Pandemic** [1060, 1133, 1341, 1433, 1680]. **Paper** [41, 42, 62, 98, 171]. **Paper-Based** [62]. **Papers** [80, 138, 1031, 1145]. **paradigm** [1551]. **paradoxes** [674]. **parallelizability** [617]. **Parameter** [444, 1174]. **parameters** [557, 914]. **parametric** [365]. **parenthood** [1632]. **Pareto** [1681]. **Paris** [882]. **parsers** [1386]. **parsing** [1080, 1630]. **partial** [472]. **Participant** [129, 369]. **participant-observer** [369]. **participants** [527]. **Participation** [525, 673, 877, 905, 1168, 1472]. **participatory** [1040]. **partitioning** [259, 479]. **partnership** [1219]. **partnerships** [500]. **party** [1274, 1395, 1438]. **past** [487, 811, 1257, 1618]. **patch** [850, 921, 1089, 1607]. **patches** [665, 1212, 1267, 1311, 1607, 1623]. **Path** [1234, 1239]. **pattern** [364, 384, 607, 1069, 1525, 1727]. **Patterns** [199, 242, 319, 331, 730, 844, 888, 897, 911, 936, 947, 996, 997, 1035, 1211, 1223, 1584, 1616, 1635, 1689]. **PDF** [831]. **Peer** [129, 360, 1145, 1206]. **peer-to-peer** [360]. **people** [522]. **perceive** [584, 1673]. **Perceived** [521, 739, 834, 1146]. **perception** [1206, 1345, 1500]. **perceptions** [1012, 1020, 1104, 1529]. **perfect** [1011]. **perform** [813, 1016, 1371]. **Performance** [86, 155, 201, 341, 391, 443, 448, 521, 522, 576, 628, 650, 654, 716, 781, 789, 813, 827, 836, 899, 914, 936, 960, 989, 995, 1018, 1024, 1026, 1115, 1151, 1225, 1232, 1248, 1254, 1259, 1265, 1269, 1355, 1358, 1386, 1393, 1406, 1413, 1428, 1433, 1492, 1504, 1520, 1532, 1566, 1604, 1635, 1648, 1671, 1708, 1715, 1740]. **performances** [1135]. **Performing** [23, 857]. **perils** [638]. **perish** [1051]. **permission** [1064]. **permutation** [402]. **Persistent** [791]. **personalities** [624]. **Personality** [328, 474, 484, 1251, 1567]. **Perspective** [9, 74, 124, 237, 452, 624, 1088, 1287, 1395, 1570]. **Perspective-based** [9, 74, 124, 237]. **Perspectives** [118, 621, 1668]. **perturbation** [798]. **pervasive** [1165]. **PHANTOM** [1021]. **Pharo** [1170, 1188].

Phase [158, 1676]. **Phaser** [1279]. **PhD** [67]. **Philips** [287]. **physical** [781, 1700]. **pick** [1181]. **Picking** [110]. **Pinpointing** [827]. **pipeline** [1383]. **pipelines** [921, 1440]. **Pitfalls** [784, 1339, 1346]. **pivots** [721]. **plagiarism** [1165]. **plagiarism-hiding** [1165]. **plan** [370, 970]. **plan-driven** [370, 970]. **Planning** [219, 259, 362, 618, 621, 1139, 1161]. **platform** [254, 524, 713, 762, 769, 837, 854, 994, 1024, 1052]. **platforms** [1384]. **Play** [619, 775, 1117, 1138, 1237]. **plug** [452]. **plug-in** [452]. **PMD** [1065]. **PMESSE'97** [47]. **Point** [2, 84, 1030]. **Point-Like** [84]. **Points** [185, 494, 1306]. **Polarity** [777, 1323]. **policies** [436, 1732]. **Policy** [127]. **poor** [1604]. **popular** [713, 801, 849, 1034, 1076, 1159, 1594]. **Portrait** [1285]. **positives** [1263]. **possibilistic** [1338]. **Possible** [201]. **post** [655, 1032, 1183, 1204]. **post-deployed** [1183]. **post-hoc** [655]. **post-processing** [1204]. **post-release** [1032]. **posts** [983, 1006, 1611, 1683]. **Potential** [228, 593, 780, 1358, 1613]. **potentially** [1173]. **power** [535, 711]. **power-only** [711]. **Practical** [25, 190, 274, 343, 527, 990, 1028, 1539]. **Practice** [61, 144, 209, 212, 390, 429, 497, 545, 546, 621, 730, 735, 749, 790, 1187, 1229, 1281, 1316, 1317, 1617, 1665, 1666, 1737]. **practice-driven** [390]. **Practices** [56, 304, 370, 421, 496, 517, 574, 580, 641, 662, 828, 840, 915, 934, 944, 972, 1077, 1104, 1144, 1163, 1169, 1188, 1248, 1266, 1300, 1396, 1426, 1633, 1673, 1697, 1739]. **Practitioner** [1030, 1122, 1219, 1300, 1493, 1586, 1632, 1735]. **practitioners** [1077, 1542, 1673]. **pragmatic** [733, 1174]. **Präzi** [1301]. **pre** [1259, 1468, 1483, 1683, 1687, 1694, 1736]. **pre-trained** [1259, 1468, 1483, 1683, 1687, 1694, 1736]. **precedence** [294]. **precise** [1565]. **preconditions** [1565]. **precursors** [279]. **predicates** [858]. **Predict** [408, 622, 1407, 1462, 1648, 1708]. **Predicting** [439, 486, 689, 878, 978, 1160, 1186, 1221, 1325, 1340, 1539, 1559, 1578, 1669]. **Prediction** [107, 180, 186, 281, 311–313, 339, 356, 376, 399, 401, 403, 413, 414, 419, 425, 427, 440, 448, 467, 563, 582, 590, 622, 639, 640, 648, 672, 700, 707, 732, 742, 835, 867, 872, 874, 903, 917, 950, 986, 1063, 1135, 1142, 1162, 1212, 1225, 1229, 1258, 1285, 1310, 1351, 1353, 1358, 1371, 1378, 1389, 1417, 1429, 1478, 1501, 1504, 1507, 1564, 1587, 1596, 1614, 1622, 1636, 1642, 1649, 1692]. **Predictive** [438, 895, 926, 984, 1504]. **Predictors** [550, 640, 1115, 1133]. **Preface** [432, 855, 1002, 1207, 1437]. **preferences** [624, 1318]. **Preliminary** [130, 1253, 1648, 1708]. **Preprocessor** [594]. **Preprocessor-based** [594]. **prescribing** [915]. **presentation** [938]. **Presenting** [134, 307]. **preserving** [1056, 1057]. **pressure** [898]. **prevalence** [617]. **Preventing** [875]. **prevention** [846]. **primary** [578]. **PRINS** [1277]. **Prior** [64]. **prioritisation** [259]. **prioritization** [343, 468, 573, 853, 1042, 1167, 1242, 1329, 1564, 1645, 1688, 1710]. **prioritize** [835]. **Prioritizing** [187, 235, 904, 1602, 1679]. **priority** [563, 1221, 1320]. **Privacy** [436, 750, 1108, 1177, 1382, 1647]. **Probabilities** [64]. **Problem** [75, 110, 373, 403, 683, 685, 727, 1667]. **Problems** [31, 175, 269, 495, 507, 545, 654, 769, 1229, 1286, 1360, 1394]. **Procedural** [96, 155]. **procedure** [387, 927]. **procedures** [401, 1019, 1504]. **Process** [12, 25, 26, 39, 47, 71, 77, 83, 89, 91, 119, 136, 150, 157, 173, 175, 178, 195, 285, 294, 322, 369, 389, 469, 510, 540, 785, 786, 836, 870, 909, 1067, 1083, 1114, 1262, 1351, 1357, 1511, 1704]. **processed** [1419]. **Processes** [35, 92, 207, 249, 382, 918, 1279]. **processing** [1204]. **processors** [372]. **Product** [241, 244, 377, 483, 568, 593, 626–629, 736, 744, 772, 1042, 1072, 1074, 1079, 1100,

1247, 1254, 1262, 1264, 1279, 1282, 1297, 1351, 1374, 1401, 1420, 1637]. **product-based-evolving** [1247]. **product-line** [1079]. **Production** [104, 382, 1660]. **production-like** [1660]. **productive** [722]. **Productivity** [10, 280, 528, 599, 674, 724, 731, 1012, 1037, 1133, 1160]. **products** [963]. **Profession** [61]. **Professional** [69, 520, 857]. **Professionals** [109, 211, 755, 847, 971, 1049, 1133, 1489]. **profiles** [325]. **Profiling** [361]. **Program** [154, 158, 254, 309, 320, 410, 432, 447, 501, 529, 557, 695, 805, 817, 823–826, 855, 881, 966, 997, 1002, 1088, 1089, 1149, 1207, 1217, 1267, 1350, 1448, 1484, 1553, 1623, 1651, 1746]. **programmable** [482]. **programme** [1381]. **Programmer** [38, 724, 1670]. **Programmers** [45, 46, 59, 670, 696, 852, 881, 1017, 1403, 1476, 1731]. **Programming** [180, 199, 208, 243, 328, 368, 461, 484, 503, 679, 819, 825, 884, 889, 901, 985, 1009, 1041, 1054, 1060, 1137, 1192, 1260, 1390, 1568, 1575, 1689]. **programming-related** [1260]. **Programs** [58, 105, 108, 199, 406, 827, 925, 949, 1050, 1234, 1459, 1473, 1488, 1573, 1714]. **Project** [29, 81, 100, 181, 187, 192, 219, 255, 353, 521, 582, 639, 655, 691, 707, 742, 747, 893, 986, 996, 1056, 1057, 1063, 1168, 1225, 1378, 1458, 1507, 1649]. **project-level** [655, 1649]. **project-specific** [996, 1168]. **Projects** [211, 231, 271, 295, 337, 379, 413, 425, 428, 488, 543, 599, 610, 662, 664, 665, 688, 689, 705, 743, 754, 797, 832, 885, 897, 946, 948, 965, 1021, 1036, 1046, 1065, 1075, 1114, 1136, 1152, 1175, 1195, 1214, 1224, 1274, 1315, 1340, 1391, 1430, 1446, 1472, 1476, 1485, 1523, 1530, 1579, 1618, 1709, 1729, 1738]. **ProMeTA** [805]. **PromeTrans** [1687]. **Promises** [638, 1132]. **promoting** [1610]. **prompt** [1582]. **Prompter** [642]. **Prone** [30, 64, 79, 167, 351]. **proneness** [314, 367, 384, 408, 409, 486, 1069, 1117, 1555, 1597]. **Propagating** [1230]. **propagation** [246, 284, 655, 1010, 1097, 1669]. **properties** [1290]. **property** [1369]. **proposing** [628]. **proprietary** [490, 832]. **ProSim'98** [71]. **Prospects** [31]. **protected** [949]. **Protecting** [147]. **Protection** [1490, 1725]. **protestware** [1712]. **Protocols** [262]. **prototyping** [1495]. **provenance** [1022, 1487]. **providers** [1732]. **provisions** [1730]. **proxy** [1719]. **pruning** [1693]. **pseudo** [883]. **pseudo-tested** [883]. **PSP** [87, 103]. **psychological** [1610]. **psychometric** [368]. **PTM4Tag** [1683]. **Public** [857, 1022, 1387, 1680, 1738]. **Publication** [67]. **Publish** [1051]. **Published** [130, 170, 171]. **Pull** [909, 948, 1295, 1336, 1464, 1477, 1503, 1511, 1568, 1619, 1641, 1722]. **purpose** [410, 817, 1471]. **push** [1088]. **PyPI** [974]. **PyPy** [914]. **Python** [871, 1170, 1199, 1223, 1315, 1399, 1416, 1439, 1487, 1488, 1519, 1667].

Q&A [663, 783, 874, 882, 952, 1185, 1397, 1415, 1543]. **QIP** [29]. **QIP/GQM** [29]. **QoS** [359]. **QoS-aware** [359]. **Qt** [1152, 1335]. **Qualitative** [26, 142, 143, 225, 352, 385, 386, 407, 495, 757, 792, 1286, 1432, 1664, 1672]. **Quality** [3, 10, 87, 117, 122, 123, 135, 186, 190, 202, 217, 218, 270, 275, 280, 302, 303, 308, 362, 377, 380, 437, 445, 486, 524, 534, 544, 567, 641, 651, 701, 724, 731, 739, 772, 933, 962, 980, 987, 1065, 1081, 1083, 1091, 1130, 1256, 1264, 1282, 1295, 1318, 1375, 1422, 1424, 1446, 1508, 1605, 1610, 1640, 1682, 1684]. **quality-related** [1422]. **Quantifying** [31, 275, 629]. **Quantitative** [129, 201, 336, 352, 489, 495, 757, 1664]. **Quantization** [1347]. **quantum** [1580]. **quasi** [308, 379, 474]. **quasi-experiment** [379]. **quasi-experimental** [308, 474]. **queries** [814, 920, 1027, 1184, 1299]. **query** [902]. **Querying** [332, 864, 875]. **Question** [770, 1006, 1314, 1397, 1415, 1582]. **question-and-answer** [1415]. **Questionnaire** [57]. **questions**

[870, 993, 1006, 1196, 1260, 1366]. **Quick** [1205].

R [767, 1486]. **race** [1463]. **railway** [844]. **raised** [612, 870]. **randomised** [307]. **randomized** [1625]. **randomness** [507]. **rank** [640, 660, 909, 995]. **rank-performance-based** [995]. **Ranking** [592, 791, 1450]. **Rap4DQ** [1196]. **rapid** [534, 564, 566, 765, 921, 1431, 1665]. **RASP** [1725]. **rated** [1115]. **Rater** [659]. **Rates** [117]. **ratings** [837, 849]. **Rationale** [1302]. **Re** [456, 967, 1064, 1104, 1705]. **re-delegation** [1064]. **re-implementation** [967]. **re-opened** [456]. **re-optimization** [1705]. **Re-visiting** [1104]. **React** [947, 1503]. **Reaction** [801, 947, 1503]. **reactions** [1712]. **read** [696]. **Readability** [1238, 1467, 1528, 1581, 1651]. **readers** [831]. **Reading** [9, 118, 188, 196, 237, 540, 1625]. **README** [886]. **Real** [199, 265, 610, 709, 809, 1016, 1085, 1203, 1315, 1320, 1380, 1553, 1579]. **real-time** [610, 1085, 1320, 1380]. **real-world** [1203, 1553]. **reality** [1367]. **Realizing** [303]. **Really** [50, 118, 452, 554, 761, 858, 1308, 1410]. **reasonable** [578]. **reasoning** [529]. **Recapture** [70]. **recipe** [1264, 1282]. **recognition** [829, 1727]. **Recognizing** [954, 1053]. **recommend** [1127, 1196, 1568]. **Recommendation** [760, 763, 768, 1054, 1126, 1131, 1155, 1204, 1430, 1676, 1683]. **Recommendations** [1276, 1616, 1628, 1666]. **recommender** [1190, 1638]. **Recommending** [569, 1095]. **reconstructing** [318]. **Reconstruction** [1515]. **recording** [1372]. **Recovering** [511]. **recovery** [323, 583, 682, 684, 703, 780, 887, 1230, 1483]. **recruitment** [1616]. **recurrent** [937]. **Recurring** [722]. **reduce** [1636]. **Reducing** [341, 785, 1339]. **reduction** [306, 903, 1620]. **Redundancy** [860]. **Redundancy-free** [860]. **redundant** [1636]. **Reengineering** [736, 859, 979, 1633]. **refactor** [1208]. **Refactoring** [512, 530, 541, 621, 651, 678, 1023, 1175, 1208, 1293, 1426, 1469, 1474, 1560, 1563, 1682]. **refactorings** [616, 1156, 1672]. **reference** [569]. **references** [1540]. **refinement** [242]. **Refining** [369, 416, 1606]. **Reflections** [1213]. **reformulate** [920]. **reformulation** [902]. **Registered** [1435]. **Regression** [32, 33, 206, 231, 365, 378, 402, 425, 441, 906, 1243, 1269, 1585, 1631]. **regression-based** [1243]. **regressions** [1612]. **regular** [696, 1198]. **regulations** [961, 1730]. **Reinforcement** [1491, 1656, 1674]. **reinventing** [967]. **rejected** [1389]. **relate** [772]. **Related** [518, 631, 833, 904, 950, 1091, 1138, 1183, 1260, 1355, 1394, 1422, 1449, 1598, 1730]. **relating** [535, 1211]. **Relation** [739, 919, 958, 1025, 1091]. **relational** [348]. **relations** [703]. **Relationship** [181, 284, 308, 524, 570, 1027, 1251, 1358, 1411, 1463]. **relationships** [521]. **Relative** [86, 314, 339, 367, 867, 1446]. **RELAXing** [508]. **Release** [373, 613, 734, 765, 840, 921, 1032, 1097, 1110, 1595]. **releases** [534, 564, 1159, 1412, 1736]. **relevance** [383, 990]. **Relevant** [338, 770, 843, 906, 997, 1058, 1196, 1289, 1392, 1743]. **Reliability** [165, 168, 236, 267, 299, 334, 358, 400, 401, 448, 648, 659, 700, 1115, 1370]. **reliable** [1376]. **remaining** [682]. **remedy** [1205]. **Remote** [1575]. **Removal** [1093, 1094, 1267]. **renaming** [1425]. **reopened** [1272]. **repackaged** [939]. **Repair** [326, 357, 529, 709, 821, 823–826, 850, 966, 997, 1089, 1149, 1178, 1267, 1313, 1350, 1553, 1571, 1623]. **repairing** [827, 1539]. **repairs** [965]. **Repeat** [964]. **Repeatable** [13, 310, 399]. **repeatedly** [1200]. **Replace** [1158, 1321]. **replay** [576, 1372]. **Replaying** [246]. **replicability** [769]. **Replicated** [18, 103, 122, 192, 237, 267, 405, 470, 473, 474, 516, 672]. **Replicating** [112, 289, 964].

Replication [68, 69, 199, 411, 472, 475, 478, 622, 662, 817, 1118, 1137, 1257, 1383, 1453, 1575, 1634, 1665, 1674]. **Replications** [296, 297, 381, 471, 714, 1096]. **Reply** [42, 171]. **RePOR** [1023]. **Report** [23, 36, 47, 59, 65, 71, 88, 387, 540, 563, 592, 646, 757, 794, 980, 1139, 1171, 1181, 1376, 1422, 1613]. **reported** [1070]. **Reporting** [292, 327, 379, 520, 618, 1187]. **Reports** [257, 430, 540, 591, 813, 822, 851, 870, 875, 904, 1027, 1070, 1095, 1221, 1359, 1408, 1435, 1475, 1621, 1743]. **Repositories** [329, 332, 404, 417, 457, 532, 589, 633, 637, 686, 764, 890, 993, 999, 1155, 1160, 1202, 1205, 1221, 1364, 1387, 1543]. **repository** [382, 412, 693, 769, 1076, 1540]. **representation** [825, 1467, 1517, 1716]. **representations** [364, 737, 912, 1350, 1578]. **Representing** [1515]. **Reproduce** [1292]. **Reproducibility** [404, 957, 1121, 1130, 1260, 1678]. **reproducible** [559, 1292]. **reproduction** [951, 1257, 1348]. **ReqOptimizer** [658]. **Request** [948, 1295, 1336, 1511, 1722]. **Requests** [183, 785, 909, 945, 1464, 1477, 1503, 1568, 1619, 1641, 1679]. **requirement** [445, 730]. **Requirements** [12, 18, 26, 68, 69, 111, 118, 135, 169, 195, 222, 244, 259, 318, 343, 350, 396, 411, 422, 470, 517, 537, 538, 542, 573, 611, 656, 658, 711, 714, 719, 730, 734, 747, 749, 790, 802, 828, 842, 844, 853, 895, 915, 941, 961, 1019, 1046, 1081, 1083, 1116, 1140, 1189, 1567, 1643, 1684, 1730]. **Requirements-Based** [111]. **requirements-related** [1730]. **requirements-test** [915]. **rerunning** [1452]. **resampling** [867]. **Research** [49, 93, 125, 139, 144–147, 232, 327, 347, 385, 386, 389, 394, 446, 478, 487, 558, 559, 565, 595, 623, 676, 725, 756, 842, 894, 906, 988, 990, 1015, 1040, 1087, 1128, 1180, 1206, 1218, 1247, 1270, 1324, 1366, 1383, 1739]. **Researchers** [61, 95, 147]. **reserved** [1578]. **residence** [1429]. **resolution** [490, 622, 785, 828, 1005]. **resolve** [708]. **resolved** [778]. **Resolving** [498, 870, 1498]. **Resource** [935, 965, 1119]. **resources** [1403]. **Respect** [217, 1258]. **Responding** [1494]. **response** [1455, 1489]. **Responsibilities** [95]. **responsibility** [1563]. **RESTful** [1119, 1512]. **Results** [4, 87, 303, 307, 399, 623, 627, 655, 723, 725, 728, 781, 794, 1030, 1038, 1096, 1505, 1528]. **rethinking** [865]. **Retraction** [1025]. **retrieval** [320–322, 324, 350, 435, 505, 511, 646, 685, 717, 770, 813, 887, 920, 1027, 1109, 1214, 1622, 1667]. **retrieval-based** [1027, 1109]. **retrieved** [404]. **retrospective** [1504]. **retrospectives** [722, 1218]. **reuse** [3, 269, 280, 486, 730, 967, 1190, 1373, 1470, 1551, 1555, 1589, 1697]. **reuse-proneness** [486]. **reused** [325]. **reusing** [325, 811]. **revealing** [959, 1681, 1737]. **revelatory** [756]. **Reverse** [282, 284, 315, 451, 602, 704, 805]. **reverted** [910]. **Review** [129, 145, 163, 280, 349, 369, 390, 530, 544, 564, 577, 608, 641, 673, 877, 899, 909, 957, 964, 1015, 1032, 1058, 1145, 1146, 1152, 1171, 1206, 1228, 1242, 1244, 1256, 1265, 1270, 1275, 1295, 1335, 1363, 1388, 1457, 1462, 1485, 1541, 1542, 1564, 1586, 1615, 1637, 1652, 1653, 1657, 1665, 1672, 1679, 1690, 1691, 1709, 1728, 1735]. **Reviewer** [237, 969]. **Reviewers** [579, 653, 758, 848, 877, 1107, 1568, 1623]. **Reviewing** [116, 194, 835, 1212]. **Reviews** [81, 155, 208, 578, 612, 830, 837, 845, 849, 854, 932, 941, 1066, 1154, 1191, 1228, 1237, 1275, 1344, 1431, 1468, 1472, 1629, 1648, 1665, 1708, 1722]. **revised** [1153]. **revision** [271, 860]. **revisions** [1007, 1291]. **revisited** [674]. **Revisiting** [708, 813, 917, 1098, 1257, 1259, 1262, 1272, 1304]. **revivifying** [1588]. **reward** [905]. **rich** [1660]. **Right** [110]. **rigor** [383]. **Ringelmann** [599]. **Risk** [30, 343, 521, 737, 1407, 1470]. **Risk-Management** [30]. **risks** [1274]. **Risky** [231]. **Robot** [1576]. **robotic** [1520]. **robotics** [1404]. **Robust**

[160, 509, 669, 678, 1343, 1576]. **robustness** [1165, 1424, 1662]. **Role** [91, 223, 296, 297, 317, 381, 472, 1075, 1184, 1236, 1265, 1376, 1464, 1503, 1610, 1685]. **Roles** [96, 129, 155, 211, 384, 1201]. **Rotten** [1170]. **rounds** [1212]. **routing** [1360]. **Roxygen** [1486]. **Rubbing** [1469]. **Ruby** [771]. **RubyGems** [1296]. **rule** [306, 843, 1215]. **rule-based** [843, 1215]. **rule-coverage** [306]. **Rules** [190, 556, 768, 1351, 1512, 1651]. **run** [976, 1566, 1618]. **run-time** [976, 1566]. **runtime** [798, 1725]. **Rust** [1658].

S [552]. **S-EI** [552]. **safe** [704, 1562]. **Safest** [220]. **safety** [255, 648, 970, 1610, 1730]. **safety-critical** [255, 970]. **salt** [1469]. **same** [1159]. **same-day** [1159]. **sample** [1628]. **Sampling** [869, 1074, 1227, 1270]. **SAT** [1394]. **SATD** [1650]. **Satisfaction** [431, 720, 1236, 1433]. **satisfiability** [450, 963, 1394]. **satisfy** [520]. **satisfying** [1550]. **saving** [1358]. **says** [1529]. **SBSE** [1338]. **Scala** [1050]. **scalability** [1319]. **Scalable** [547, 604, 912, 1071, 1227, 1277]. **Scale** [28, 351, 568, 570, 599, 615, 625, 646, 681, 687, 699, 709, 734, 756, 773, 812, 894, 913, 992, 1022, 1089, 1106, 1147, 1224, 1235, 1240, 1262, 1292, 1342, 1344, 1381, 1431, 1469, 1494, 1506, 1566, 1688, 1697, 1699, 1703]. **Scaling** [56, 157, 1594]. **SCEMP** [469]. **Scenario** [118, 1041]. **Scenario-Based** [118]. **Scenarios** [51, 746, 1140]. **Schedule** [100]. **Schema** [229]. **scheme** [476]. **Science** [105, 879, 1015, 1387, 1438]. **scientific** [1086, 1701]. **scientist** [1395]. **Scientists** [232]. **SCodeSearcher** [1745]. **scope** [475]. **scoping** [1083]. **scorecard** [1171]. **Scratch** [1459]. **screen** [657]. **screen-captured** [657]. **Screencasts** [697, 985, 1059]. **Screenshot** [1359]. **Scripted** [928]. **scripting** [1490]. **scripts** [1569]. **scrum** [1014, 1075, 1375]. **scrutiny** [975]. **SDK** [1071]. **SE** [1118, 1383]. **SE-specific** [1118]. **Search** [338, 371, 374, 375, 389, 415, 441–444, 506, 529, 649–651, 658, 660, 661, 671, 676, 741, 746, 814, 853, 902, 906, 912, 942, 943, 951, 964, 1174, 1184, 1233, 1243, 1283, 1298, 1318, 1347, 1348, 1374, 1443, 1475, 1571, 1590, 1667, 1681, 1745]. **Search-Based** [375, 444, 506, 649–651, 658, 661, 671, 676, 942, 943, 951, 1174, 1243, 1283, 1318, 1347, 1348, 1374, 1571, 1590, 1681]. **searches** [507, 964]. **second** [1381]. **second-generation** [1381]. **Secondary** [1298]. **secret** [1148, 1263]. **secrets** [1748]. **Section** [532, 536, 589, 602, 649, 676, 718, 723, 764, 890, 916, 922, 926, 979]. **sector** [1738]. **secure** [580, 1703, 1714]. **Securing** [1747]. **Security** [634, 714, 737, 923, 953, 1013, 1064, 1108, 1125, 1177, 1192, 1217, 1296, 1311, 1369, 1398, 1401, 1439, 1469, 1470, 1479, 1498, 1619, 1623, 1666, 1677, 1714, 1724, 1725, 1732]. **seed** [1513]. **Seeing** [1461, 1645]. **seeking** [272]. **SEI** [57]. **Selecting** [168, 565, 959, 1395, 1560]. **Selection** [32, 256, 267, 542, 573, 578, 627, 636, 746, 963, 995, 1013, 1039, 1233, 1239, 1242, 1431, 1451, 1513, 1603, 1616, 1688]. **Selenium** [1141]. **Self** [421, 754, 1043, 1061, 1111, 1115, 1169, 1222, 1238, 1284, 1323, 1331, 1332, 1377, 1445, 1451, 1578, 1710, 1725, 1740]. **Self-admitted** [754, 1043, 1111, 1169, 1222, 1284, 1323, 1331, 1332, 1377, 1445, 1710]. **self-assignment** [1061]. **self-determination** [1740]. **self-driving** [1451]. **self-organizing** [421]. **Self-Protection** [1725]. **self-rated** [1115]. **self-supervision** [1578]. **self-trials** [1238]. **Semantic** [453, 710, 788, 1101, 1252, 1261, 1506, 1589, 1736]. **Semantically** [518, 1422, 1430]. **Semantically-enhanced** [1430]. **Semantics** [826, 845, 925, 1372]. **semantics-aware** [1372]. **semantics-based** [826]. **Semantics-driven** [925]. **Semi** [365, 564, 578, 797, 843, 1086, 1284]. **Semi-automatic** [578, 843, 1086]. **semi-parametric** [365]. **semi-structured** [797]. **semi-supervised** [1284].

semi-systematic [564]. **sense** [539, 1309]. **Sensitive** [150, 1325, 1345]. **Sentiment** [725, 777, 1118, 1168, 1710]. **sentinel** [1719]. **sequence** [375, 1204]. **Sequences** [56]. **series** [657, 759, 1021]. **server** [334, 433, 949, 1379, 1624]. **server-** [1624]. **server-side** [433, 1379]. **serverless** [1715]. **Servers** [236, 1349]. **Service** [183, 448, 1404, 1477, 1493, 1584]. **service-oriented** [448]. **Services** [359, 940, 1119]. **SeSG** [1298]. **Session** [236]. **Session-Based** [236]. **set** [683, 1337]. **sets** [398, 771]. **setting** [484, 857]. **seven** [861]. **Seventh** [59]. **several** [356]. **severe** [1226]. **severity** [645, 678, 1744]. **share** [1044]. **shared** [406, 1152, 1200, 1641]. **shared-memory** [406]. **Sharing** [49, 197, 553, 697, 1128]. **shelf** [1118]. **shift** [403]. **Short** [220, 876]. **short-lived** [876]. **Shorter** [862]. **shot** [1654]. **Should** [424, 560, 702, 976, 1326]. **shoulders** [1031]. **Shuttle** [34]. **Siamese** [912]. **siblings** [1591]. **Side** [204, 433, 1379, 1490, 1624]. **sight** [1136]. **signature** [1588]. **Silent** [1545]. **Silver** [44]. **similar** [1488]. **similarity** [581, 746, 810, 931, 1649, 1705]. **simple** [1226, 1622]. **Simulated** [260]. **Simulation** [71, 97, 170, 171, 618, 716, 998, 1451, 1679]. **simulation-based** [1451]. **Simulations** [192]. **Simulink** [863]. **Single** [152, 289, 1176, 1391, 1563]. **single-company** [289]. **Single-state** [1176]. **site** [1490]. **sites** [663, 763, 874, 952]. **situation** [1225]. **six** [517]. **Size** [58, 181, 726, 1142, 1628]. **Sized** [172, 496]. **sizes** [795]. **sizing** [2]. **Skewness** [105]. **skip** [1636]. **Slack** [1231]. **slices** [309]. **Slicing** [154, 265, 924]. **slow** [1419]. **SLR** [853, 964]. **Small** [496, 889, 1334, 1628]. **Small-Amp** [1334]. **smalltalk** [461, 1188]. **Smart** [769, 930, 994, 1052, 1183, 1343, 1499, 1548, 1608, 1720, 1742]. **SmartFast** [1343]. **Smartphones** [1307]. **smell** [418, 614, 919, 950, 1025, 1148, 1258, 1457, 1578, 1744]. **smell-related** [950]. **Smells** [248, 495, 541, 554, 773, 800, 919, 923, 938, 1025, 1148, 1253, 1278, 1287, 1335, 1338, 1345, 1361, 1370, 1400, 1482, 1577, 1580, 1597, 1599, 1624]. **Smoke** [1226]. **Smoothly** [19]. **snapshots** [1257, 1618]. **snippets** [885, 1238]. **social** [437, 562, 664, 946, 1559]. **soft** [1745]. **SoftNER** [1271]. **Software** [22, 23, 38, 42, 47, 49, 56, 61, 62, 64, 65, 67, 77, 79, 80, 83, 84, 86, 88, 93, 95, 105, 108, 117, 119, 123, 124, 127, 131, 133, 134, 136, 143–145, 150, 152, 155, 157, 161, 165, 167, 170–173, 175, 176, 178, 186, 190, 202, 203, 206, 216, 218, 222, 224, 336, 425, 450, 462, 510, 562, 653, 669, 744, 758, 777, 799, 821, 848, 851, 879, 916, 988, 1047, 1048, 1077, 1079, 1107, 1120, 1213, 1252, 1300, 1404, 1431, 1437, 1501, 1571, 1637]. **Software** [24, 28, 31, 34, 35, 41, 68–70, 78, 89, 100, 102, 104, 107, 116, 125, 130, 135, 142, 147, 160, 168, 183, 187, 188, 192, 197, 201, 204, 207, 211, 217, 219, 225, 229, 231, 232, 257, 262, 267, 290, 296, 308, 348, 352, 388, 394, 417, 437, 440, 444, 453, 455, 467, 488, 533, 573, 579, 609, 613, 617, 626, 687, 720, 721, 736, 788, 794, 856, 859, 860, 867, 890, 929, 971, 984, 993, 1001, 1022, 1091, 1219, 1240, 1248, 1270, 1341, 1347, 1375, 1384, 1436, 1454, 1538, 1574, 1575, 1605, 1610, 1644]. **software** [5, 8, 247, 253, 270, 299, 307, 324, 329, 330, 354, 355, 357, 371, 385, 404, 412, 413, 435, 463, 471, 474, 489, 499, 504, 506, 511, 532, 536, 558, 559, 583, 589, 610, 633, 662, 689, 694, 705, 747, 750, 755, 756, 772, 798, 808, 834, 847, 861, 895, 896, 913, 926, 962, 979, 987, 990, 1010, 1015, 1033, 1037, 1074, 1100, 1110, 1115, 1145, 1202, 1206, 1228, 1235, 1247, 1256, 1259, 1290, 1324, 1365, 1406, 1413, 1435, 1451, 1468, 1480, 1495, 1502, 1529, 1533, 1539, 1552, 1638, 1640, 1642, 1690, 1712, 1724, 1735, 1739, 1740]. **software** [3, 13, 241, 248, 249, 261, 277, 287, 291, 292, 294, 297, 306, 310, 319, 326, 334, 340, 342, 367, 380, 381, 386, 391, 398, 399, 426, 438, 448, 454, 469, 473, 480, 496, 527, 529, 534, 535, 537, 564, 575, 593, 594, 624, 641, 648, 649, 654,

672, 676, 680, 697, 715, 718, 725, 732, 733, 815, 878, 897, 956, 957, 970, 999, 1007, 1036, 1044, 1046, 1051, 1081, 1155, 1160, 1167, 1186, 1199, 1221, 1254, 1305, 1329, 1352, 1355, 1357, 1388, 1421, 1430, 1478, 1485, 1489, 1532, 1535, 1536, 1543, 1626, 1628, 1643, 1646, 1659, 1661, 1738]. **software** [10, 271, 272, 280, 295, 298, 302, 304, 327, 349, 365, 370, 397, 400, 402, 423, 430, 442, 446, 456, 464, 466, 483, 487, 524, 546, 553, 566, 600, 602, 628, 629, 631, 637, 651, 652, 666, 684, 686, 700, 703, 723, 728, 743, 764, 784, 796, 802, 807, 816, 832, 843, 872, 884, 892, 898, 927, 977, 978, 1021, 1028, 1045, 1078, 1096, 1122, 1126, 1133, 1135, 1146, 1147, 1150, 1157, 1180, 1187, 1244, 1266, 1279, 1291, 1297, 1327, 1391, 1420, 1433, 1447, 1491, 1492, 1500, 1504, 1547, 1551, 1616, 1622, 1665, 1675, 1694]. **software** [71, 195, 254, 286, 332, 335, 358, 403, 443, 449, 457, 476, 478, 507, 513, 518, 565, 599, 605, 618, 643, 646, 683, 701, 763, 780, 791, 937, 963, 1065, 1072, 1128, 1131, 1142, 1162, 1176, 1205, 1236, 1272, 1285, 1318, 1364, 1372, 1393, 1401, 1423, 1446, 1460, 1487, 1527, 1540, 1550, 1570, 1595, 1649, 1699, 1706, 1737]. **software-engineering** [1626]. **Software-intensive** [1300]. **software-related** [1355]. **solution** [666, 1014, 1054]. **solutions** [390, 1735]. **solvers** [450, 573, 963, 1409]. **solving** [650, 1394]. **Some** [4, 86]. **SonarQube** [1351]. **Sony** [748]. **Source** [133, 140, 141, 152, 200, 271, 337, 345, 346, 366, 367, 382, 430, 456, 459, 493, 505, 513, 514, 538, 581, 587, 594, 599, 601, 609, 617, 662, 665, 687, 688, 694, 710, 748, 754, 757, 797, 802, 806, 816, 856, 868, 888, 889, 894, 897, 913, 922, 928, 1022, 1029, 1044, 1046, 1059, 1065, 1087, 1114, 1136, 1163, 1165, 1169, 1186, 1195, 1201, 1215, 1223, 1252, 1272, 1279, 1327, 1340, 1367, 1410, 1446, 1472, 1487, 1506, 1515, 1528, 1530, 1555, 1579, 1605, 1651, 1653, 1661, 1693, 1695, 1712, 1726, 1729, 1738]. **source-code** [816]. **SourceForge.net** [337]. **Sources** [244, 411, 1365, 1445]. **sourcing** [832]. **space** [464, 479, 529, 804, 1291, 1302]. **spaces** [1409]. **Spain** [882]. **spam** [351]. **sparse** [1693]. **SparseCoder** [1693]. **Spearheading** [1075]. **Special** [72, 80, 245, 310, 315, 320, 329, 358, 371, 399, 412, 417, 432, 442, 457, 501, 522, 532, 536, 558, 589, 602, 626, 649, 676, 718, 723, 764, 799, 806, 821, 842, 855, 859, 890, 916, 922, 926, 929, 979, 984, 1002, 1123, 1207, 1437, 1448, 1538]. **specialisation** [491]. **specific** [410, 663, 716, 770, 808, 817, 937, 954, 996, 1118, 1168, 1360, 1490, 1663]. **specification** [240]. **specification-based** [240]. **Specifications** [169, 482, 483]. **specifying** [1299]. **spectra** [551]. **spectra-based** [551]. **spectrum** [1315]. **speed** [377, 1372, 1473, 1542, 1601, 1714]. **SPICE** [57]. **SPL** [887, 1279]. **Splitting** [514, 515, 949, 1515]. **spoil** [311]. **spot** [1147, 1612]. **spread** [1444]. **spreadsheet** [541]. **Sprint** [1218]. **SPVF** [1369]. **SQL** [1449, 1550]. **SQL-related** [1449]. **squares** [365]. **SSPCatcher** [1311]. **SSUCD** [341]. **stability** [666, 751, 798, 1063, 1210]. **stable** [761]. **stack** [481, 615, 663, 767, 868, 869, 885, 905, 907, 952, 983, 1006, 1127, 1129, 1179, 1200, 1208, 1211, 1260, 1314, 1389, 1392, 1415, 1582, 1598, 1611, 1683]. **stage** [241]. **stage-gate** [241]. **Stamelos** [170]. **STAMINA** [449]. **Stamped** [1120]. **Standing** [1031]. **star** [837, 849]. **start** [851]. **start-up** [851]. **startup** [840, 1157]. **startups** [721, 1157, 1460]. **State** [92, 282, 354, 429, 605, 730, 749, 787, 790, 991, 1055, 1125, 1176, 1229, 1317, 1393, 1402, 1409, 1737]. **state-based** [787]. **state-of-practice** [1737]. **state-of-the-art** [1402, 1409]. **StateAFL** [1349]. **statechart** [344]. **stateful** [1349]. **statement** [702, 1234]. **Statements** [46, 751, 1625]. **states** [344, 1143]. **Static** [286, 468, 504, 572, 981, 1065, 1186, 1191, 1209, 1255, 1258, 1353, 1380, 1385, 1408, 1410, 1446, 1498, 1627, 1720]. **statically** [1018]. **statically-detectable** [1018]. **Statistical** [295, 494, 533, 669]. **status** [1458]. **stay**

[1473, 1714]. **steady** [1393]. **Steal** [125]. **Steam** [713, 762, 854]. **still** [1618]. **Stochastic** [664]. **stolen** [1748]. **stopping** [260]. **store** [619, 775, 818, 845, 941, 1237, 1570]. **stores** [932]. **stories** [387]. **Story** [387, 566, 1306]. **Strategies** [45, 256, 338, 552, 918, 1009, 1081, 1265, 1298, 1329, 1595]. **strategy** [359, 485, 734]. **Strengths** [423]. **string** [1298]. **Structural** [299, 397, 453, 629, 1003, 1466]. **Structure** [2, 55, 414, 565, 604, 663]. **Structured** [17, 40, 98, 307, 379, 499, 797]. **structures** [820, 946]. **structuring** [814]. **Stubbifier** [1379]. **student** [347, 1104, 1115, 1529]. **Students** [109, 148, 755, 847, 971, 1575]. **Studies** [23, 25, 47, 58, 59, 65, 88–92, 102, 122, 142, 143, 224, 280, 282, 289, 292, 344, 347, 369, 401, 404, 445, 476, 478, 489, 571, 578, 624, 680, 733, 769, 795, 1028, 1104, 1298, 1372, 1383, 1528, 1533, 1713]. **Study** [27, 33, 35, 45, 78, 79, 87, 96, 103, 109, 110, 136, 152, 169, 177, 182, 195, 202, 209, 218, 222, 232, 267, 279, 308, 373, 377, 388, 428, 463, 499, 505, 517, 525, 538, 554, 561, 567, 570, 596, 601, 609, 613, 621, 632, 662, 687, 724, 735, 740, 756, 779, 781, 786, 788, 798, 828, 900, 921, 974, 1033, 1066, 1091, 1159, 1192, 1222, 1225, 1235, 1248, 1292, 1317, 1323, 1381, 1415, 1444, 1455, 1465, 1494, 1495, 1497, 1502, 1553, 1567, 1568, 1575, 1580, 1600, 1603, 1613, 1617, 1631, 1647, 1672, 1697, 1726]. **study** [247–249, 276, 318, 325, 330, 342, 362, 386, 393, 409, 424, 429, 431, 469, 474, 482, 504, 515, 519, 562, 564, 580, 581, 585, 588, 593, 594, 600, 619, 638, 641, 667, 672, 691, 732, 734, 762, 792, 834, 838, 854, 870, 907, 908, 914, 933, 939, 944, 946, 964, 970, 992, 1011, 1016, 1031, 1034, 1046, 1052, 1061, 1081, 1086, 1093, 1148, 1160, 1172, 1185, 1200, 1216, 1224, 1229, 1257, 1267, 1276, 1288, 1326, 1335, 1373, 1386, 1416, 1428, 1468, 1479, 1505, 1532, 1535, 1561, 1593, 1633, 1639, 1641, 1661, 1673, 1674, 1698, 1711, 1730, 1747]. **study** [243, 254, 264, 284, 286, 327, 346, 364, 384, 392, 395, 465, 479, 491, 495, 550, 556, 615, 627, 628, 647, 652, 663, 665, 699, 703, 739, 748, 784, 796, 803, 812, 824, 850, 880, 883, 967, 994, 1012, 1020, 1026, 1050, 1065, 1083, 1099, 1103, 1117, 1118, 1124, 1132, 1133, 1137, 1152, 1157, 1168, 1176, 1179, 1184, 1187, 1208, 1231, 1237, 1240, 1253, 1263, 1278, 1286, 1332, 1342, 1361, 1368, 1391, 1410, 1418, 1419, 1423, 1438, 1453, 1456, 1473, 1476, 1498, 1545, 1548, 1566, 1569, 1574, 1599, 1619, 1632, 1634, 1650, 1651, 1665, 1678, 1679, 1704, 1723, 1727, 1748]. **study** [265, 350, 478, 746, 752, 767, 934, 948, 952, 1156, 1195, 1314, 1443, 1449, 1524, 1714]. **Studying** [224, 382, 389, 437, 456, 524, 598, 635, 639, 664, 675, 713, 775, 815, 831, 833, 837, 849, 901, 913, 934, 1114, 1195, 1197, 1281, 1449, 1499, 1523, 1529]. **style** [434, 948, 1521]. **Styler** [1313]. **subject** [341]. **subject-based** [341]. **Subjective** [187, 248, 302]. **Subjects** [69, 109, 147, 1104]. **subset** [995]. **succeed** [1695]. **Success** [12, 81, 104, 119, 187, 525, 566, 718, 720, 1219]. **Successes** [865]. **Successful** [176, 423, 485]. **suffix** [316]. **suggested** [1623]. **suggesting** [960]. **suggestions** [706]. **suitability** [1713]. **Suite** [214, 333, 443, 452, 677, 824, 1608]. **suites** [306, 452, 547]. **summaries** [581]. **summarization** [1181, 1506, 1653]. **summarize** [540]. **summarizing** [845]. **supervised** [917, 927, 983, 1284, 1734]. **supervision** [1080, 1526, 1578]. **supplementary** [665]. **supply** [1675]. **Support** [17, 98, 226, 244, 362, 378, 411, 422, 441, 582, 785, 814, 841, 1366, 1372, 1438, 1450, 1479, 1499, 1631, 1665]. **Supporting** [228, 559, 841, 1316, 1563]. **surprisal** [1685]. **Survey** [144, 191, 201, 212, 557, 633, 730, 853, 1049, 1194, 1324, 1632, 1735, 1739]. **surveying** [784]. **surveys** [623, 1030]. **survivability** [989]. **survival** [1597]. **sustainability** [1605]. **sweet** [1147]. **SWordNet** [518]. **Symposium** [80, 161]. **synchronization** [1110]. **synchronize** [1332]. **synchronous** [416]. **syntactic**

[1698]. **syntactical** [1004]. **Syntax** [316, 819, 858, 1473, 1515, 1521, 1714]. **syntax-guided** [1521]. **synthesis** [450, 571, 632, 1137, 1746]. **synthesizing** [990]. **synthetic** [1573]. **System** [243, 393, 490, 525, 537, 550, 629, 648, 704, 720, 745, 763, 782, 828, 850, 940, 960, 1042, 1252, 1277, 1291, 1400, 1411, 1453, 1576, 1645, 1700, 1725]. **system-of-systems** [1700]. **Systematic** [349, 369, 390, 478, 511, 525, 530, 544, 564, 577, 578, 600, 627, 736, 836, 888, 957, 991, 1146, 1228, 1242, 1244, 1256, 1388, 1456, 1457, 1596, 1637, 1665, 1690]. **systematically** [1116]. **systemic** [980, 1465]. **Systems** [12, 17, 19, 52, 82, 90, 107, 230, 274, 345, 352, 360, 376, 420, 448, 509, 588, 594, 617, 680, 687, 740, 757, 760, 766, 789, 813, 891, 892, 913, 973, 1010, 1049, 1091, 1123, 1126, 1172, 1209, 1215, 1220, 1227, 1232, 1243, 1272, 1300, 1316, 1320, 1327, 1331, 1413, 1426, 1430, 1442, 1453, 1480, 1496, 1520, 1532, 1549, 1597, 1635, 1640, 1656, 1668, 1674, 1700, 1721, 1729]. **systems-of-systems** [509]. **SZZ** [1124, 1229, 1606, 1733].

tabu [441]. **tabular** [737]. **Tackling** [685]. **tactics** [1724]. **Tag** [763, 1496, 1683]. **tags** [1129]. **tailored** [1040]. **tailoring** [1357]. **taint** [1203, 1299]. **taint-flow** [1299]. **TaintBench** [1203]. **Take** [862, 1266]. **talk** [643]. **talking** [481, 1508]. **tangled** [590]. **tangling** [1337]. **Task** [38, 158, 272, 657, 1150, 1273, 1365, 1521, 1569, 1638, 1648, 1708]. **tasks** [422, 835, 857, 889, 1023, 1054, 1189, 1259, 1372, 1449, 1491, 1613, 1694, 1706]. **Taxonomy** [75, 466, 805, 1440, 1486, 1518, 1577, 1709]. **TCTracer** [1255]. **TD** [1415]. **teaching** [347]. **Team** [219, 308, 377, 474, 553, 599, 1012, 1131, 1147, 1235, 1594]. **Teams** [238, 303, 421, 568, 722, 946, 1061, 1103, 1120, 1610, 1646, 1659, 1740]. **Technical** [211, 585, 608, 754, 783, 784, 874, 952, 1030, 1043, 1090, 1093, 1111, 1143, 1169, 1222, 1284, 1323, 1331, 1332, 1377, 1415, 1445, 1465, 1519, 1559, 1592, 1710]. **Technique** [194, 218, 240, 711, 983, 1135]. **Techniques** [13, 18, 86, 176, 186, 202, 224, 228, 229, 253, 259, 266, 312, 324, 405, 449, 475, 493, 497, 515, 614, 630, 666, 744, 808, 823, 903, 931, 955, 1039, 1062, 1109, 1149, 1183, 1255, 1315, 1397, 1429, 1452, 1456, 1553, 1603, 1613, 1621, 1692]. **Technologies** [22, 277, 286]. **Technology** [163, 340, 383, 523, 570]. **telemetry** [550, 575]. **tell** [1188]. **templates** [714]. **TensorFlow** [1545]. **term** [350, 685, 735]. **term-based** [350]. **term-mismatch** [685]. **terminology** [466, 843]. **terraform** [1732]. **Test** [14, 32, 128, 177, 235, 240, 256, 260, 266, 285, 303, 306, 333, 377, 382, 402, 406, 443, 452, 468, 472, 473, 479, 485, 547, 554, 627, 636, 677, 679, 731, 744, 793, 794, 824, 850, 863, 869, 896, 915, 919, 928, 980, 1025, 1042, 1091, 1102, 1119, 1148, 1167, 1174, 1233, 1242, 1255, 1268, 1281, 1329, 1334, 1353, 1356, 1370, 1396, 1416, 1451, 1452, 1459, 1475, 1589, 1590, 1602, 1603, 1607, 1608, 1645, 1660, 1681, 1682, 1688, 1743, 1746]. **Test-based** [1607]. **test-case-based** [473]. **Test-Driven** [285, 472, 485, 731, 1102]. **test-generation** [240]. **test-suite** [824]. **test-to-code** [1255]. **test-with** [377]. **testability** [1500]. **testbed** [340]. **testbeds** [277]. **tested** [883]. **TestEvoViz** [1356]. **Testing** [10, 33, 194, 205, 228, 229, 234, 252, 274, 299, 360, 367, 374, 375, 465, 473, 475, 545, 549, 564, 576, 654, 735, 781, 794, 809, 865, 891, 898, 906, 928, 942, 943, 998, 1016, 1019, 1020, 1042, 1158, 1163, 1226, 1239, 1240, 1243, 1300, 1321, 1322, 1324, 1330, 1333, 1347, 1348, 1380, 1414, 1451, 1453, 1454, 1479, 1491, 1524, 1526, 1585, 1591, 1609, 1618, 1631, 1637, 1668, 1674, 1681, 1688, 1721, 1725, 1739]. **testing-based** [1239]. **Tests** [302, 472, 919, 1025, 1170, 1226, 1400, 1407, 1612, 1618, 1663]. **text** [351, 430, 622, 754, 920, 931, 1027, 1298, 1418, 1550, 1604, 1726]. **text-based** [931, 1418, 1604]. **text-oriented** [1726]. **text-retrieval-based** [920]. **text-to-SQL**

[1550]. **texts** [1101]. **textual** [397, 431, 581, 1047, 1048]. **Their** [377, 624, 753, 795, 962, 965, 1069, 1071, 1084, 1152, 1158, 1195, 1205, 1286, 1321, 1410, 1463, 1505, 1664]. **them** [584, 869]. **thematic** [571]. **themed** [1113]. **theoretical** [1037]. **theories** [628]. **Theory** [5, 41, 42, 130, 314, 367, 388, 421, 1061, 1177, 1232, 1470, 1481, 1556, 1586, 1592, 1670, 1690]. **there** [1023, 1393, 1425]. **think** [533]. **third** [1274, 1395, 1438]. **third-party** [1274, 1395, 1438]. **Those** [211]. **Threats** [964, 1339]. **Three** [196, 205, 218, 423, 476, 714]. **Three-Group** [218]. **Threshold** [180]. **thresholds** [398]. **throughout** [708, 1729]. **ticket** [785]. **Time** [109, 326, 413, 490, 492, 498, 610, 622, 639, 657, 706, 738, 752, 759, 813, 898, 914, 917, 976, 1021, 1063, 1085, 1120, 1291, 1302, 1320, 1346, 1378, 1380, 1462, 1477, 1494, 1501, 1504, 1546, 1566, 1587, 1622, 1625, 1642, 1649, 1692]. **time-based** [492, 1063, 1346]. **time-series** [657, 1021]. **Time-Stamped** [1120]. **timed** [925]. **times** [357]. **title** [1582, 1611]. **toggle** [873]. **Toggles** [1077, 1094]. **token** [1273, 1639, 1693]. **token-based** [1639]. **token-level** [1273]. **tolerance** [359]. **too** [311]. **Tool** [62, 97, 170, 171, 244, 345, 411, 560, 717, 841, 853, 1343, 1366, 1398, 1539]. **Tool-Based** [62]. **Tools** [38, 114, 148, 226, 246, 323, 337, 527, 528, 573, 717, 725, 748, 809, 953, 981, 1118, 1165, 1189, 1191, 1263, 1385, 1408, 1432, 1446, 1573, 1593, 1623, 1725, 1739]. **top** [667, 837]. **Topic** [460, 468, 633, 710, 815, 1155, 1180, 1430]. **topics** [481, 539, 1179, 1208, 1384]. **TQL** [1299]. **Trace** [279, 350, 685, 802, 1638]. **traceability** [323, 511, 537, 538, 680–684, 1214, 1230, 1245, 1255]. **TraceLab** [559]. **traces** [433, 760, 887, 1598]. **Tracing** [705, 1108, 1194]. **trackers** [1685]. **Tracking** [696, 813, 881, 1022, 1028, 1156, 1283, 1331, 1372, 1496, 1651]. **trade** [863, 872, 1520]. **trade-off** [863, 872]. **trade-offs** [1520]. **Traditional** [169, 427]. **trained** [1259, 1468, 1483, 1683, 1687, 1694, 1736]. **training** [683, 896]. **training-set** [683]. **traits** [484]. **transactions** [1419]. **Transfer** [548, 1088]. **transferred** [1687]. **Transformation** [345, 742, 812, 1303, 1405, 1484, 1562]. **transformations** [864]. **transformed** [640]. **Transformer** [1578, 1716]. **Transformer-based** [1578, 1716]. **transition** [871, 1209]. **transitioning** [1381]. **translation** [242, 610, 937, 1554, 1658, 1667, 1668]. **transparency** [611]. **transpilation** [1580]. **Tree** [117, 123, 924]. **tree-** [924]. **Trees** [316, 1515]. **trends** [275, 282, 481, 712, 1208]. **Triaging** [1359, 1408]. **trial** [1625]. **trials** [1238]. **Triangulation** [298]. **triggers** [738]. **trivial** [974, 1082]. **true** [1526]. **Trust** [152, 643, 1388]. **Trusted** [1608]. **trustworthy** [1109]. **tuning** [444, 927, 1174]. **Turducken** [1521]. **Turducken-style** [1521]. **turn** [1518]. **tutorial** [1129, 1392]. **TVM** [1368]. **tweets** [786]. **Twelve** [175]. **twincode** [1575]. **Two** [137, 352, 369, 623, 694, 1238, 1383, 1591, 1676]. **two-phase** [1676]. **Type** [254, 978, 1658, 1711]. **Type-migrating** [1658]. **typed** [240, 1334]. **types** [328, 551, 612, 989, 1093]. **TypeScript** [1709]. **typing** [504, 1080].

UML [153, 213, 242, 255, 281, 344, 363, 364, 483, 490, 530, 587, 816, 834, 975]. **UML-based** [255, 483]. **Uncertain** [167]. **uncertainty** [508, 1338, 1413]. **undefined** [1333]. **Underlying** [56]. **understand** [856, 1473, 1529]. **understandability** [344, 1512, 1535]. **understandable** [1055]. **Understanding** [104, 264, 308, 331, 352, 433, 436, 452, 525, 534, 595, 783, 797, 857, 876, 932, 982, 1128, 1130, 1145, 1152, 1177, 1265, 1316, 1399, 1424, 1464, 1482, 1652, 1675, 1706, 1724]. **unexpected** [1193]. **Unified** [52, 1273].

Uniform [1227]. **unifying** [1302]. **UniMod** [787]. **uninstrumented** [776]. **uniqueness** [1487]. **Unisys** [195]. **Unit** [234, 1348, 1416, 1590]. **units** [1568]. **universal** [640]. **universe** [1087]. **Unix** [693]. **unreliability** [645, 717]. **unreliable** [1164]. **Unreproducible** [1546]. **unseen** [1406]. **unspecified** [740]. **unstable** [1186]. **unsupervised** [917]. **unveiled** [1682]. **Unveiling** [1715]. **UPC** [1719]. **update** [753, 1249, 1499]. **updated** [619]. **updates** [667, 713, 1274, 1283]. **updating** [960]. **upgradeability** [1719]. **upgrades** [561]. **uplift** [921]. **upper** [1657]. **Upstream** [1328]. **urgent** [713]. **Usability** [72, 74, 75, 616]. **Usable** [73, 794]. **Usage** [114, 188, 196, 415, 681, 692, 699, 885, 987, 1031, 1190, 1368, 1432, 1558, 1574]. **Usage-Based** [188, 196, 1190]. **usage-independent** [987]. **usages** [647, 1274, 1443]. **Use** [25, 96, 112, 223, 226, 262, 341, 378, 414, 458, 461, 526, 633, 651, 672, 703, 711, 714, 735, 738, 746, 755, 834, 847, 986, 1042, 1050, 1124, 1259, 1289, 1300, 1326, 1423, 1711]. **Used** [86, 186, 266, 427, 1077, 1172]. **used-by** [1001]. **useful** [786, 1304, 1541, 1728]. **usefulness** [1728]. **User** [396, 525, 612, 720, 739, 785, 814, 837, 838, 843, 904, 1070, 1154, 1230, 1237, 1344, 1400, 1406, 1468, 1475, 1498, 1505, 1643, 1647, 1737]. **user-perceived** [739]. **user-related** [904]. **user-reported** [1070]. **users** [775]. **uses** [588]. **Using** [69, 109, 125, 157, 165, 192, 201, 225, 242, 248, 289, 307, 316, 321, 337, 351, 372, 375, 388, 396, 397, 410, 441, 445, 450, 453, 467, 480, 486, 528, 559, 573, 575, 597, 615, 622, 639, 696, 697, 725, 729, 732, 748, 754, 787, 815, 817, 836, 845, 846, 884, 902, 920, 946, 954, 974, 978, 993, 1001, 1013, 1021, 1067, 1095, 1104, 1120, 1155, 1160, 1171, 1186, 1191, 1242, 1245, 1253, 1298, 1312, 1325, 1331, 1346, 1359, 1362, 1371, 1407, 1447, 1466, 1475, 1484, 1487, 1516, 1568, 1588, 1612, 1626, 1658, 1665, 1697, 1700, 1702, 1722, 1724]. **using** [148, 187, 311, 387, 439, 443, 468, 476, 563, 591, 909, 963, 1127, 1255, 1284, 1285, 1340, 1401, 1547, 1601, 1648, 1656, 1708]. **using/used** [1001]. **using/used-by** [1001]. **utility** [1550]. **utilize** [868]. **utilized** [1168]. **UX** [1460].

valid [679]. **validated** [1083]. **Validating** [521, 1056, 1057]. **Validation** [74, 185, 252, 517, 681, 1140, 1302]. **Validity** [2, 63, 401, 726, 769, 957, 1339, 1370, 1504, 1533]. **Value** [339, 446, 582, 867, 1375, 1410]. **Value-cognitive** [582]. **values** [444, 1447]. **variability** [496, 594, 628, 631, 704, 991, 1086, 1250, 1302, 1404]. **variability-safe** [704]. **variable** [1249, 1254, 1425, 1488]. **variance** [413, 795, 1715]. **variants** [704]. **variate** [1045]. **Variation** [491, 516]. **Variational** [1394]. **variations** [249]. **variED** [1085]. **various** [1560]. **VCCFinder** [1098]. **VCL** [975]. **VCS** [1087]. **Vector** [378, 441, 582, 804]. **VEER** [1441]. **vehicle** [1360]. **Vendor** [940, 1695]. **vendor-led** [1695]. **vendors** [1033]. **verification** [345, 517, 1209, 1254, 1505]. **verified** [1052]. **version** [588, 606, 973, 986, 1327]. **versioning** [1261, 1736]. **versions** [644, 1033, 1071]. **versus** [191, 259, 711, 1214, 1262]. **very** [756, 1381]. **vetting** [1071]. **via** [333, 912, 1001, 1080, 1177, 1223, 1335, 1369, 1417, 1515, 1662, 1676, 1701]. **viable** [509]. **video** [1516, 1602]. **videos** [657, 1516]. **View** [774, 800, 1030, 1219, 1586]. **View-Controller** [800]. **Viewpoint** [61, 67, 134, 334]. **views** [318]. **VioDroid** [1583]. **VioDroid-Finder** [1583]. **violating** [954]. **violations** [606, 1313, 1514]. **virtual** [781, 998, 1367]. **virus** [1113]. **vision** [1633]. **visiting** [1104]. **Visitor** [1525]. **Visual** [46, 332, 545, 735, 975]. **Visualising** [1438]. **visualization** [317, 630]. **Visualizing** [1247, 1356]. **voice** [990]. **Volunteer** [149]. **vs** [213, 289, 499, 519, 707, 737, 1047, 1048,

1453, 1551, 1572]. **Vu** [1372]. **Vulcans** [225]. **vulnerabilities** [366, 634, 691, 778, 907, 953, 1029, 1064, 1173, 1296, 1308, 1439, 1479, 1498, 1509, 1539, 1553, 1675]. **Vulnerability** [427, 644, 942, 943, 971, 1097, 1098, 1117, 1369, 1371, 1418, 1427, 1531, 1604, 1608, 1747]. **vulnerability-contributing** [1098]. **vulnerability-proneness** [1117]. **vulnerable** [1136].

Wait [1043, 1111]. **war** [387]. **warning** [297, 1065, 1410, 1446]. **warnings** [271, 1258]. **Waste** [523]. **waterfall** [747]. **way** [945]. **WCET** [372]. **WCRE** [315]. **weak** [1547]. **weaknesses** [1548, 1714]. **Wealth** [49]. **Wear** [838]. **web** [148, 182, 211, 213, 236, 334, 359, 366, 378, 465, 519, 741, 759, 869, 942, 943, 960, 1119, 1512, 1624]. **web-based** [148, 960]. **Web-Development** [211]. **WebDriver** [1141]. **websites** [783, 1185, 1397, 1415]. **Weighing** [583]. **Weighted** [1162]. **weighting** [291]. **Welcome** [121]. **Well** [238, 1133, 1160, 1690]. **well-being** [1133, 1160, 1690]. **were** [1178]. **WESS** [65]. **wheels** [967]. **Where** [1019, 1044, 1178, 1280, 1682]. **whether** [856]. **Which** [702, 703, 1326, 1537, 1585]. **while** [543, 857]. **whispers** [1047, 1048]. **white** [1668]. **white-box** [1668]. **whole** [387, 547, 677]. **whom** [668]. **WIA** [1733]. **WIA-SZZ** [1733]. **WiFi** [1520]. **Wikifying** [1078]. **wild** [634, 1330, 1698]. **Will** [717, 876, 1246]. **windows** [672, 1592]. **wise** [259]. **within** [10, 212, 339, 475, 1056, 1057]. **within-company** [339]. **within-project** [1056, 1057]. **without** [199]. **women** [1680]. **word** [297, 1613]. **words** [518, 1578]. **Work** [113, 116, 528, 624, 1061, 1308, 1433, 1460, 1518, 1632, 1733]. **workarounds** [1476]. **worked** [571]. **workers** [1266]. **Workflow** [1087, 1387]. **workflows** [1067, 1438]. **Working** [315, 899]. **Workload** [236, 334, 491]. **Works** [1292]. **Workshop** [23, 47, 59, 71, 88, 131]. **workshops** [1401].

World [1016, 1087, 1203, 1315, 1553]. **worth** [869, 889, 1446]. **wound** [1469]. **write** [1714]. **writer** [1670]. **written** [933].

XML [942, 943]. **XP** [209]. **XSnare** [1490].

year [1341]. **Years** [194, 1370]. **Yes** [139].

Zealand [1489]. **Zen** [658]. **ZenReqOptimizer** [658].

References

Anonymous:1996:E

[1] Anonymous. Editorial. *Empirical Software Engineering*, 1(1):5–10, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/BF00125808`.

Jeffery:1996:FPS

[2] Ross Jeffery and John Stathis. Function point sizing: Structure, validity and applicability. *Empirical Software Engineering*, 1(1):11–30, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/BF00125809`.

Khoshgoftaar:1996:ISE

[3] Taghi M. Khoshgoftaar, Edward B. Allen, Kalai S. Kalaichelvan, and Nishith Goel. The impact of software evolution and reuse on software quality. *Empirical Software Engineering*, 1(1):31–44, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.`

springer.com/accesspage/article/10.1007/BF00125810.

Frazier:1996:CAF

[4] Thomas P. Frazier, John W. Bailey, and Melissa L. Corso. Comparing Ada and FORTRAN lines of code: Some experimental results. *Empirical Software Engineering*, 1(1):45–59, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/BF00125811.

Briand:1996:AMT

[5] Lionel Briand, Khaled El Emam, and Sandro Morasca. On the application of measurement theory in software engineering. *Empirical Software Engineering*, 1(1):61–88, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/BF00125812. See comments [41] and reply [42].

Anonymous:1996:I

[6] Anonymous. "In this issue". *Empirical Software Engineering*, 1(2):103, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/BF00368699.

Basili:1996:E

[7] Victor R. Basili. Editorial. *Empirical Software Engineering*, 1(2):105–108, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/BF00368700.

Daly:1996:EID

[8] John Daly, Andrew Brooks, James Miller, Marc Roper, and Murray Wood. Evaluating inheritance depth on the maintainability of object-oriented software. *Empirical Software Engineering*, 1(2):109–132, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/BF00368701.

Basili:1996:EIP

[9] Victor R. Basili, Scott Green, Oliver Laitenberger, Filippo Lanubile, Forrest Shull, Sivert Sørumgård, and Marvin V. Zelkowitz. The empirical investigation of Perspective-Based Reading. *Empirical Software Engineering*, 1(2):133–164, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/BF00368702.

Sova:1996:ITP

[10] Donald W. Sova and Carol Smidts. Increasing testing productivity and software quality: A comparison of software testing methodologies within NASA. *Empirical Software Engineering*, 1(2):165–188, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/BF00368703.

Harrison:1996:I

[11] Warren Harrison and Victor Basili. In this issue. *Empirical Software Engineering*, 1(3):199, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/BF00127445.

ElEmam:1996:IMS

[12] Khaled El Emam and Nazim H. Madhavji. An instrument for measuring the success of the requirements engineering process in information systems development. *Empirical Software Engineering*, 1(3):201–240, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/BF00127446.

Lott:1996:RSE

[13] Christopher M. Lott and H. Dieter Rombach. Repeatable software engineering experiments for comparing defect-detection techniques. *Empirical Software Engineering*, 1(3):241–277, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/BF00127447.

Munson:1996:ETE

[14] John C. Munson and Gregory A. Hall. Estimating test effectiveness with dynamic complexity measurement. *Empirical Software Engineering*, 1(3):279–305, ???? 1996. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/BF00127448.

Harrison:1997:Ia

[15] Warren Harrison and Victor Basili. "In This Issue". *Empirical Software Engineering*, 2(1):5, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009737831028.

Harrison:1997:E

[16] Warren Harrison. Editorial. *Empirical Software Engineering*, 2(1):7–10, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009738115098.

Jankowski:1997:CAS

[17] David Jankowski. Computer-aided systems engineering methodology support and its effect on the output of structured analysis. *Empirical Software Engineering*, 2(1):11–38, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009790131937. See correspondence [98].

Fusaro:1997:REA

[18] Pierfrancesco Fusaro, Filippo Lanubile, and Giuseppe Visaggio. A replicated experiment to assess requirements inspection techniques. *Empirical Software Engineering*, 2(1):39–57, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009742216007.

Avritzer:1997:MSD

[19] Alberto Avritzer and Elaine J. Weyuker. Monitoring smoothly degrading systems for increased dependability. *Empirical Software Engineering*,

2(1):59–77, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009794200077.

Basili:1997:I

[20] Victor R. Basili and Warren Harrison. In this issue. *Empirical Software Engineering*, 2(2):91, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009749707764.

Briand:1997:GEI

[21] Lionel C. Briand. Guest Editor's introduction. *Empirical Software Engineering*, 2(2):93–95, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009752530706.

Lanubile:1997:EES

[22] Filippo Lanubile. Empirical evaluation of software maintenance technologies. *Empirical Software Engineering*, 2(2):97–108, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009788914777.

Kemerer:1997:MPE

[23] Chris F. Kemerer and Sandra Slaughter. Methodologies for performing empirical studies: Report from the International Workshop on Empirical Studies of Software Maintenance. *Empirical Software Engineering*, 2(2):109–118, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009741031615.

Porter:1997:FLA

[24] Adam A. Porter. Fundamental laws and assumptions of software maintenance. *Empirical Software Engineering*, 2(2):119–131, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009793015685.

Valett:1997:PUE

[25] Jon D. Valett. The practical use of empirical studies for maintenance process improvement. *Empirical Software Engineering*, 2(2):133–142, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009745132524.

ElEmam:1997:QAR

[26] Khaled El Emam and Dirk Hoeltje. Qualitative analysis of a requirements change process. *Empirical Software Engineering*, 2(2):143–152, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009797116594.

Lindvall:1997:EIA

[27] Mikael Lindvall. Evaluating impact analysis — a case study. *Empirical Software Engineering*, 2(2):152–158,

???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009749217503.

vonMayrhauser:1997:IOK

[28] Anneliese von Mayrhauser and A. Marie Vans. On increasing our knowledge of large-scale software comprehension. *Empirical Software Engineering*, 2(2): 159–163, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009753301573.

Morasca:1997:AQG

[29] Sandro Morasca. Applying QIP/GQM in a maintenance project. *Empirical Software Engineering*, 2(2):163–166, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009705418411.

Ohlsson:1997:ERM

[30] Niclas Ohlsson, Ann Christin Eriksson, and Mary Helander. Early risk-management by identification of fault-prone modules. *Empirical Software Engineering*, 2(2):166–173, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009757419320.

Rosenberg:1997:PPQ

[31] Jarrett Rosenberg. Problems and prospects in quantifying software maintainability. *Empirical Software Engineering*, 2(2):173–177, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009761520228.

Rothermel:1997:ERT

[32] Gregg Rothermel and Mary Jean Harrold. Experience with regression test selection. *Empirical Software Engineering*, 2(2):178–188, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009765704299.

Rosenblum:1997:LLR

[33] David S. Rosenblum and Elaine J. Weyuker. Lessons learned from a regression testing case study. *Empirical Software Engineering*, 2(2): 188–191, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009717821137.

Schneidewind:1997:NSS

[34] Norman Schneidewind. NASA Shuttle software maintenance evolution. *Empirical Software Engineering*, 2(2): 192–196, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009769822046.

Seaman:1997:SSM

[35] Carolyn B. Seaman and Victor R. Basili. The study of software maintenance organizations and processes. *Empirical Software Engineering*, 2(2):

197–201, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009773922954.

Tryggeseth:1997:REI

[36] Eirik Tryggeseth. Report from an experiment: Impact of documentation on maintenance. *Empirical Software Engineering*, 2(2):201–207, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009778023863.

Harrison:1997:Ib

[37] Warren Harrison and Victor Basili. In this issue. *Empirical Software Engineering*, 2(3):219, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009792132622.

Bowdidge:1997:HSE

[38] Robert W. Bowdidge and William G. Griswold. How software engineering tools organize programmer behavior during the task of data encapsulation. *Empirical Software Engineering*, 2(3):221–267, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009716016693.

Lott:1997:CEE

[39] Christopher M. Lott. A controlled experiment to evaluate on-line process guidance. *Empirical Software Engineering*, 2(3):269–289, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009768000763.

Briand:1997:ECM

[40] Lionel C. Briand, Christian Bunse, John W. Daly, and Christiane Differding. An experimental comparison of the maintainability of object-oriented and structured design documents. *Empirical Software Engineering*, 2(3):291–312, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009720117601.

Zuse:1997:CPB

[41] Horst Zuse. Comments to the paper: Briand, Eman, Morasca: *On the Application of Measurement Theory in Software Engineering. Empirical Software Engineering*, 2(3):313–316, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009772101672. See [5, 42].

Briand:1997:RCP

[42] Lionel Briand, Khaled El Emam, and Sandro Morasca. Reply to "Comments to the Paper: Briand, El Emam, Morasca: *On the Application of Measurement Theory in Software Engineering*". *Empirical Software Engineering*, 2(3):317–322, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/

10.1023/A%3A1009724318510. See [5, 41].

Harrison:1997:Ic

[43] Warren Harrison and Victor Basili. In this issue. *Empirical Software Engineering*, 2(4):331, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009787616928.

Brooks:1997:MAS

[44] Andy Brooks. Meta analysis — a silver bullet — for meta-analysts. *Empirical Software Engineering*, 2(4): 333–338, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009793700999.

Silverman:1997:SSC

[45] Barry G. Silverman and Toufic Mehzer. A study of strategies for computerized critiquing of programmers. *Empirical Software Engineering*, 2(4): 339–359, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009745817837.

Kiper:1997:VDD

[46] James D. Kiper, Brent Auernheimer, and Charles K. Ames. Visual depiction of decision statements: What is best for programmers and non-programmers? *Empirical Software Engineering*, 2(4): 361–379, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009797801907.

Harrison:1997:PME

[47] R. Harrison, L. Briand, J. Daly, M. Kellner, D. M. Raffo, and M. J. Shepperd. Process Modelling and Empirical Studies of Software Evolution (PMESSE'97) workshop report. *Empirical Software Engineering*, 2(4): 381–403, ???? 1997. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009749918745.

Harrison:1998:I

[48] Warren Harrison and Victor Basili. In this issue. *Empirical Software Engineering*, 3(1):5, ???? 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009762620398.

Harrison:1998:SWA

[49] Warren Harrison. Sharing the wealth: Accumulating and sharing lessons learned in empirical software engineering research. *Empirical Software Engineering*, 3(1):7–8, ???? 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009731704468.

Johnson:1998:DEI

[50] Philip M. Johnson and Danu Tjahjono. Does every inspection really need a meeting? *Empirical Software Engineering*, 3(1):9–35, ???? 1998. CODEN ESENFW. ISSN

1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009787822215.

Miller:1998:FES

[51] J. Miller, M. Wood, and M. Roper. Further experiences with scenarios and checklists. *Empirical Software Engineering*, 3(1):37–64, ???? 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009735805377.

Briand:1998:UFC

[52] Lionel C. Briand, John W. Daly, and Jürgen Wüst. A unified framework for cohesion measurement in object-oriented systems. *Empirical Software Engineering*, 3(1):65–117, ???? 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009783721306.

Anonymous:1998:Ia

[53] Anonymous. "In This Issue". *Empirical Software Engineering*, 3(2):127, ???? 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1017174214236.

Anonymous:1998:E

[54] Anonymous. Editorial. *Empirical Software Engineering*, 3(2):129–130, ???? 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1017180131074.

Cross:1998:CSD

[55] James H. Cross II, T. Dean Hendrix, and Saeed Maghsoodloo. The control structure diagram: An overview and initial evaluation. *Empirical Software Engineering*, 3(2):131–158, ???? 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1008085415145.

Bilotta:1998:GSC

[56] John G. Bilotta and John F. McGrew. A Guttman scaling of CMM Level 2 practices: Investigating the implementation sequences underlying software engineering maturity. *Empirical Software Engineering*, 3(2): 159–177, ???? 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1008084231983.

Fusaro:1998:ICS

[57] Pierfrancesco Fusaro, Khaled El Emam, and Bob Smith. The internal consistencies of the 1987 SEI Maturity Questionnaire and the SPICE Capability Dimension. *Empirical Software Engineering*, 3(2):179–201, ???? 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1008036316053.

Harrold:1998:ESC

[58] Mary Jean Harrold, James A. Jones, and Gregg Rothermel. Empirical

studies of control dependence graph size for C programs. *Empirical Software Engineering*, 3(2):203–211, ???? 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1008088300124`.

Wiedenbeck:1998:CRS

[59] Susan Wiedenbeck. Conference report: The Seventh Empirical Studies of Programmers Workshop. *Empirical Software Engineering*, 3(2): 213–216, ???? 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1008040416962`.

Anonymous:1998:Ib

[60] Anonymous. In this issue. *Empirical Software Engineering*, 3(3): 227, September 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1026407403905`.

Anonymous:1998:VLE

[61] Anonymous. Viewpoint: Linking education with practice: Involving software engineering educators and researchers in the profession. *Empirical Software Engineering*, 3(3):229–231, September 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1017105420743`.

MacDonald:1998:CTB

[62] F. MacDonald and J. Miller. A comparison of tool-based and paper-based software inspection. *Empirical Software Engineering*, 3(3):233–253, September 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009747104814`.

Harrison:1998:IAV

[63] R. Harrison, S. J. Counsell, and R. V. Nithi. An investigation into the applicability and validity of object-oriented design metrics. *Empirical Software Engineering*, 3(3):255–273, September 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009784121652`.

Khoshgoftaar:1998:CFP

[64] Taghi M. Khoshgoftaar and Edward B. Allen. Classification of fault-prone software modules: Prior probabilities, costs, and model evaluation. *Empirical Software Engineering*, 3(3):275–298, September 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009736205722`.

Briand:1998:ESS

[65] Lionel Briand, Filippo Lanubile, Shari L. Pfleeger, Gregg Rothermel, and Norman Schneidewind. Empirical studies of software maintenance: A report from WESS '97. *Empirical Software Engineering*, 3(3):299–307, September 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009788222561`.

Anonymous:1998:Ic

[66] Anonymous. In this issue. *Empirical Software Engineering*, 3(4):323, December 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1017182819376`.

Jeffery:1998:VPA

[67] Ross Jeffery. Viewpoint: PhD abstract publication in empirical software engineering. *Empirical Software Engineering*, 3(4):325–326, December 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009731703447`.

Sandahl:1998:ERE

[68] Kristian Sandahl, Ola Blomkvist, Joachim Karlsson, Christian Krysander, Mikael Lindvall, and Niclas Ohlsson. An extended replication of an experiment for assessing methods for software requirements inspections. *Empirical Software Engineering*, 3(4):327–354, December 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009724120285`.

Porter:1998:CDM

[69] Adam Porter and Lawrence Votta. Comparing detection methods for software requirements inspections: A replication using professional subjects. *Empirical Software Engineering*, 3(4):355–379, December 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009776104355`.

Runeson:1998:EEE

[70] Per Runeson and Claes Wohlin. An experimental evaluation of an experience-based capture–recapture method in software code inspections. *Empirical Software Engineering*, 3(4):381–406, December 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009728205264`.

Raffo:1998:SPS

[71] David Raffo. Software Process Simulation Modeling (ProSim'98): Workshop report. *Empirical Software Engineering*, 3(4):407–412, December 1998. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009732322102`.

Scholtz:1999:ISI

[72] Jean Scholtz and Ben Shneiderman. Introduction to special issue on usability engineering. *Empirical Software Engineering*, 4(1):5–10, ???? 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009852413783`.

Paterno:1999:EDU

[73] F. Paterno and C. Mancini. Engineering the design of usable hypermedia. *Empirical Software Engineering*, 4(1):11–42, ???? 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-

7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009851130621.

Zhang:1999:PBU

[74] Zhijun Zhang, Victor Basili, and Ben Shneiderman. Perspective-based usability inspection: An empirical validation of efficacy. *Empirical Software Engineering*, 4(1):43–69, ???? 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009803214692.

Keenan:1999:UPT

[75] Susan L. Keenan, H. Rex Hartson, Dennis G. Kafura, and Robert S. Schulman. The usability problem taxonomy: A framework for classification and analysis. *Empirical Software Engineering*, 4(1):71–104, ???? 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009855231530.

Harrison:1999:Ia

[76] Warren Harrison and Victor Basili. In this issue. *Empirical Software Engineering*, 4(2):111–112, June 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009807317056.

ElEmam:1999:BKI

[77] Khaled El Emam. Benchmarking Kappa: Interrater agreement in software process assessments. *Empirical Software Engineering*, 4(2):113–133, June 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009820201126.

Walkerden:1999:ESA

[78] Fiona Walkerden and Ross Jeffery. An empirical study of analogy-based software effort estimation. *Empirical Software Engineering*, 4(2):135–158, June 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009872202035.

Khoshgoftaar:1999:CSO

[79] Taghi M. Khoshgoftaar and Edward B. Allen. A comparative study of ordering and classification of fault-prone software modules. *Empirical Software Engineering*, 4(2):159–186, June 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009876418873.

Agresti:1999:ISI

[80] William Agresti and Marvin Zelkowitz. Introduction to the special issue: Papers from the Fifth International Symposium on Software Metrics. *Empirical Software Engineering*, 4(3):195–198, September 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009828525776.

Avritzer:1999:MAL

[81] Alberto Avritzer and Elaine J. Weyuker. Metrics to assess the like-

lihood of project success based on architecture reviews. *Empirical Software Engineering*, 4(3):199–215, September 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009826509846`.

McGregor:1999:CMC

[82] John D. McGregor, Il-Hyung Cho, Brian A. Malloy, E. Lowry Curry, and Chanika Hobatr. Collecting metrics for CORBA-based distributed systems. *Empirical Software Engineering*, 4(3): 217–240, September 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009878626684`.

Elbaum:1999:SEC

[83] Sebastian G. Elbaum and John C. Munson. Software evolution and the code fault introduction process. *Empirical Software Engineering*, 4(3):241–262, September 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009830727593`.

Antoniol:1999:FPL

[84] Giuliano Antoniol, Chris Lokan, Gianluigi Caldiera, and Roberto Fiutem. A function point-like measure for object-oriented software. *Empirical Software Engineering*, 4(3):263–287, September 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009834811663`.

Harrison:1999:Ib

[85] Warren Harrison and Victor Basili. "In This Issue". *Empirical Software Engineering*, 4(4):295, December 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009886816709`.

Gray:1999:SMD

[86] Andrew R. Gray and Stephen G. MacDonell. Software metrics data analysis — exploring the relative performance of some commonly used modeling techniques. *Empirical Software Engineering*, 4(4):297–316, December 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009849100780`.

Johnson:1999:CAP

[87] Philip M. Johnson and Anne M. Disney. A critical analysis of PSP data quality: Results from a case study. *Empirical Software Engineering*, 4(4): 317–349, December 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009801218527`.

Harrison:1999:ESS

[88] R. Harrison. Empirical Studies of Software Development and Evolution (ESSDE 99) workshop report. *Empirical Software Engineering*, 4(4):351–352, December 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.`

springer.com/accesspage/article/10.1023/A%3A1009857304414.

Raffo:1999:ESA

[89] David Raffo, Timo Kaltio, Derek Partridge, Keith Phalp, and Juan F. Ramil. Empirical studies applied to software process models. *Empirical Software Engineering*, 4(4):353–369, December 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009817721252.

Bennett:1999:ESE

[90] K. Bennett, E. Burd, C. Kemerer, M. M. Lehman, M. Lee, R. Madachy, C. Mair, D. Sjoberg, and S. Slaughter. Empirical studies of evolving systems. *Empirical Software Engineering*, 4(4):370–380, December 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009869705323.

Ott:1999:RES

[91] L. M. Ott, A. Kinnula, C. Seaman, and C. Wohlin. The role of empirical studies in process improvement. *Empirical Software Engineering*, 4(4):381–386, December 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009821806231.

Briand:1999:ESO

[92] L. Briand, E. Arisholm, S. Counsell, F. Houdek, and P. Thévenod-Fosse. Empirical studies of object-oriented artifacts, methods, and processes: State of the art and future directions. *Empirical Software Engineering*, 4(4):387–404, December 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009825923070.

Harrison:1999:DME

[93] R. Harrison, N. Badoo, E. Barry, S. Biffl, A. Parra, B. Winter, and J. Wuest. Directions and methodologies for empirical software engineering research. *Empirical Software Engineering*, 4(4):405–410, December 1999. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009877923978.

Harrison:2000:Ia

[94] Warren Harrison and Victor Basili. "In This Issue". *Empirical Software Engineering*, 5(1):5, March 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009861815580.

Harrison:2000:EIE

[95] Warren Harrison. Editorial: An issue of ethics: Responsibilities and obligations of empirical software engineering researchers .... *Empirical Software Engineering*, 5(1):7–9, March 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009870532419.

Land:2000:UPR

[96] Lesley Pek Wee Land, Chris Sauer, and Ross Jeffery. The use of procedural roles in code inspections: An experimental study. *Empirical Software Engineering*, 5(1):11–34, March 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009893716489`.

Angelis:2000:STE

[97] L. Angelis and I. Stamelos. A simulation tool for efficient analogy based cost estimation. *Empirical Software Engineering*, 5(1):35–68, March 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009897800559`. See comments [170] and reply [171].

Brooks:2000:HCI

[98] Andrew Brooks, Bruce Campbell, and Louise Scott. The human–computer interface explanation: A correspondence on Jankowski's paper on methodological support for structured analysis. *Empirical Software Engineering*, 5 (1):69–71, March 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009849903285`. See [17].

Jeffrey:2000:IDA

[99] Ross Jeffrey. An introduction to "*Dissertation Abstracts*". *Empirical Software Engineering*, 5(1):73–74, March 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009862321032`.

Rainer:2000:EIS

[100] Austen Rainer. An empirical investigation of software project schedule behaviour. *Empirical Software Engineering*, 5(1):75–77, March 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009818505102`.

Harrison:2000:Ib

[101] Warren Harrison and Victor Basili. "In this issue". *Empirical Software Engineering*, 5(2):87, June 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009845804978`.

Singer:2000:EES

[102] Janice Singer and Norman Vinson. Ethics and empirical studies of software engineering. *Empirical Software Engineering*, 5(2):89–91, June 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009859121816`.

Wesslen:2000:RES

[103] Anders Wesslén. A replicated empirical study of the impact of the methods in the PSP on individual engineers. *Empirical Software Engineering*,

5(2):93–123, June 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009811222725.

vonMayrhauser:2000:AUE

[104] A. von Mayrhauser, C. Wohlin, and M. C. Ohlsson. Assessing and understanding efficiency and success of software production. *Empirical Software Engineering*, 5(2):125–154, June 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009815306795.

Gonzales:2000:CSS

[105] Michael G. Gonzales and Seshadri Paravastu. Correction of the software science length estimator skewness for 'C' language programs. *Empirical Software Engineering*, 5(2):155–159, June 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009867323634.

Anonymous:2000:EE

[106] Anonymous. EASE 2000 editorial. *Empirical Software Engineering*, 5(3):171–174, November 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1026578230075.

Shepperd:2000:BPS

[107] Martin Shepperd, Michelle Cartwright, and Gada Kadoda. On building prediction systems for software engineers. *Empirical Software Engineering*, 5(3):175–182, November 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1026582314146.

Berry:2000:IAS

[108] Michael Berry and Ross Jeffery. An instrument for assessing software measurement programs. *Empirical Software Engineering*, 5(3):183–200, November 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1026534430984.

Host:2000:USS

[109] Martin Höst, Björn Regnell, and Claes Wohlin. Using students as subjects — a comparative study of students and professionals in lead-time impact assessment. *Empirical Software Engineering*, 5(3):201–214, November 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1026586415054.

Phalp:2000:PRP

[110] Keith Phalp and Karl Cox. Picking the right problem frame — an empirical study. *Empirical Software Engineering*, 5(3):215–228, November 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1026538531893.

Lavazza:2000:RBE

[111] Luigi Lavazza and Giuseppe Valetto. Requirements-based estimation of change costs. *Empirical Software Engineering*, 5(3):229–243, November 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1026590615963`.

Cox:2000:RCU

[112] Karl Cox and Keith Phalp. Replicating the CREWS use case authoring guidelines experiment. *Empirical Software Engineering*, 5(3):245–267, November 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1026542700033`.

Brooks:2000:ELW

[113] Andrew Brooks, Fredrik Utbult, Catherine Mulligan, and Ross Jeffery. Early lifecycle work: Influence of individual characteristics, methodological constraints, and interface constraints. *Empirical Software Engineering*, 5(3):269–285, November 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1026594716872`.

Maccari:2000:EEC

[114] Alessandro Maccari and Claudio Riva. Empirical evaluation of CASE tools usage at Nokia. *Empirical Software Engineering*, 5(3):287–299, November 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1026546800942`.

Harrison:2000:Ic

[115] Warren Harrison and Victor Basili. In this issue. *Empirical Software Engineering*, 5(4):307, December 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009819402320`.

Tichy:2000:HRE

[116] Walter F. Tichy. Hints for reviewing empirical work in software engineering. *Empirical Software Engineering*, 5(4):309–312, December 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009844119158`.

Khoshgoftaar:2000:BMR

[117] Taghi M. Khoshgoftaar, Xiaojing Yuan, and Edward B. Allen. Balancing misclassification rates in classification-tree models of software quality. *Empirical Software Engineering*, 5(4):313–330, December 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1009896203228`.

Regnell:2000:PRD

[118] Björn Regnell, Per Runeson, and Thomas Thelin. Are the perspectives really different? — Further experimentation on scenario-based reading of requirements. *Empirical Software Engineering*, 5(4):331–356, December 2000. CODEN ESENFW. ISSN

1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009848320066.

Dyba:2000:IMK

[119] Tore Dyba. An instrument for measuring the key factors of success in software process improvement. *Empirical Software Engineering*, 5(4):357–390, December 2000. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009800404137.

Harrison:2001:I

[120] Warren Harrison and Victor Basili. In this issue. *Empirical Software Engineering*, 6(1):5–6, March 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009833101850.

Anonymous:2001:WNM

[121] Anonymous. Welcome to the new members of the Editorial Board. *Empirical Software Engineering*, 6(1):7–9, March 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1017339505569.

Briand:2001:RCS

[122] Lionel C. Briand, Jürgen Wüst, and Hakim Lounis. Replicated case studies for investigating quality factors in object-oriented designs. *Empirical Software Engineering*, 6(1):11–58, March 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009815306478.

Khoshgoftaar:2001:COC

[123] Taghi M. Khoshgoftaar and Edward B. Allen. Controlling overfitting in classification-tree models of software quality. *Empirical Software Engineering*, 6(1):59–79, March 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009803004576.

Laitenberger:2001:CED

[124] Oliver Laitenberger. Cost-effective detection of software defects through perspective-based inspections. *Empirical Software Engineering*, 6(1):81–84, March 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009805707387.

Sim:2001:BBS

[125] Susan Elliott Sim, Janice Singer, and Margaret-Anne Storey. Beg, borrow, or steal: Using multidisciplinary approaches in empirical software engineering research. *Empirical Software Engineering*, 6(1):85–93, March 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1009809824225.

Anonymous:2001:Ia

[126] Anonymous. In this issue. *Empirical Software Engineering*, 6(2):103–104,

June 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1017375502435.

Andrews:2001:EIE

[127] Anneliese Amschler Andrews and Arundeep S. Pradhan. Ethical issues in empirical software engineering: The limits of policy. *Empirical Software Engineering*, 6(2):105–110, June 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1011442319273.

Delamaro:2001:IMT

[128] MÁrcio Eduardo Delamaro, JosÉ Carlos Maldonado, Alberto Pasquini, and Aditya P. Mathur. Interface mutation test adequacy criterion: An empirical evaluation. *Empirical Software Engineering*, 6(2):111–142, June 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1011429104252.

dAstous:2001:QMI

[129] Patrick d'Astous, Pierre N. Robillard, Françoise Détienne, and Willemien Visser. Quantitative measurements of the influence of participant roles during peer review meetings. *Empirical Software Engineering*, 6(2): 143–159, June 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1011485205161.

Zendler:2001:PSE

[130] Andreas Zendler. A preliminary software engineering theory as investigated by published experiments. *Empirical Software Engineering*, 6(2): 161–180, June 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1011489321999.

Anonymous:2001:IWL

[131] Anonymous. 3rd International Workshop on Learning Software Organizations (LSO'01). *Empirical Software Engineering*, 6(2):181, June 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1017377007886.

Anonymous:2001:Ib

[132] Anonymous. In this issue. *Empirical Software Engineering*, 6(3): 191, September 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1017357013931.

Anonymous:2001:EOS

[133] Anonymous. Editorial: Open source and empirical software engineering. *Empirical Software Engineering*, 6(3): 193–194, September 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1017379030770.

Fenton:2001:VAC

[134] Norman Fenton. Viewpoint article: Conducting and presenting empirical software engineering. *Empirical Software Engineering*, 6(3):195–200, September 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011449731678`.

Schneidewind:2001:KRS

[135] Norman F. Schneidewind. Knowledge requirements for software quality measurement. *Empirical Software Engineering*, 6(3):201–205, September 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011435315749`.

El-Emam:2001:MLS

[136] Khaled El-Emam, Dennis Goldenson, James McCurley, and James Herbsleb. Modelling the likelihood of software process improvement: An exploratory study. *Empirical Software Engineering*, 6(3):207–229, September 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011487332587`.

Arisholm:2001:ACT

[137] Erik Arisholm, Dag I. K. Sjøberg, and Magne Jørgensen. Assessing the changeability of two object-oriented design alternatives — a controlled experiment. *Empirical Software Engineering*, 6(3):231–277, September 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011439416657`.

Anonymous:2001:CP

[138] Anonymous. Call for papers. *Empirical Software Engineering*, 6(3): 279, September 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1017331217566`.

Singer:2001:WHR

[139] Janice Singer and Norman Vinson. Why and how research ethics matters to you. Yes, you! *Empirical Software Engineering*, 6(4):287–290, December 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011998412776`.

El-Emam:2001:EOS

[140] Khaled El-Emam. Ethics and open source. *Empirical Software Engineering*, 6(4):291–292, December 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011962213685`.

Vinson:2001:GSE

[141] Norman Vinson and Janice Singer. Getting to the source of ethical issues. *Empirical Software Engineering*, 6(4): 293–297, December 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011966430523`.

Seaman:2001:EQS

[142] Carolyn B. Seaman. Ethics in qualitative studies of commercial software enterprises: Case description. *Empirical Software Engineering*, 6(4):299–300, December 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011918514594`.

Gotterbarn:2001:EQS

[143] Donald Gotterbarn. Ethics in qualitative studies of commercial software enterprises: Ethical analysis. *Empirical Software Engineering*, 6(4):301–304, December 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011970531432`.

Hall:2001:EIS

[144] Tracy Hall and Valerie Flynn. Ethical issues in software engineering research: A survey of current practice. *Empirical Software Engineering*, 6(4):305–317, December 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011922615502`.

Lethbridge:2001:MSE

[145] Timothy C. Lethbridge. Mixing software engineering research and development — what needs ethical review and what does not? *Empirical Software Engineering*, 6(4):319–321, December 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011974632340`.

Sieber:2001:YOR

[146] Joan E. Sieber. Not your ordinary research. *Empirical Software Engineering*, 6(4):323–327, December 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011926716411`.

Sieber:2001:PRS

[147] Joan E. Sieber. Protecting research subjects, employees and researchers: Implications for software engineering. *Empirical Software Engineering*, 6(4):329–341, December 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011978700481`.

Storey:2001:IEE

[148] M.-A. D. Storey, B. Phillips, and M. Maczewski. Is it ethical to evaluate Web-based learning tools using students? *Empirical Software Engineering*, 6(4):343–348, December 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1011930801390`.

Davis:2001:WVV

[149] Michael Davis. When is a volunteer not a volunteer? *Empirical Software Engineering*, 6(4):349–352, December 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.`

com/accesspage/article/10.1023/A%3A1011934918228.

Becker-Kornstaedt:2001:DSP

[150] Ulrike Becker-Kornstaedt. Descriptive software process modeling — how to deal with sensitive process information. *Empirical Software Engineering*, 6(4): 353–367, December 2001. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1011986902298.

Harrison:2002:I

[151] Warren Harrison and Victor Basili. In this issue. *Empirical Software Engineering*, 7(1):7–8, March 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1014865425120.

Bratthall:2002:CYT

[152] Lars Bratthall and Magne Jørgensen. Can you trust a single data source: Exploratory software engineering case study? *Empirical Software Engineering*, 7(1):9–26, March 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1014866909191.

Otero:2002:IEA

[153] Mari Carmen Otero and José Javier Dolado. An initial experimental assessment of the dynamic modelling in UML. *Empirical Software Engineering*, 7(1):27–47, March 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1014819010099.

Kusumoto:2002:EEP

[154] Shinji Kusumoto, Akira Nishimatsu, Keisuke Nishie, and Katsuro Inoue. Experimental evaluation of program slicing for fault localization. *Empirical Software Engineering*, 7(1):49–76, March 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1014823126938.

Land:2002:SGR

[155] Lesley Pek Wee Land. Software group reviews and the impact of procedural roles on defect detection performance. *Empirical Software Engineering*, 7(1): 77–79, March 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1014875111008.

Anonymous:2002:Ia

[156] Anonymous. In this issue. *Empirical Software Engineering*, 7(2):91–92, June 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1017449712925.

Baddoo:2002:SPI

[157] Nathan Baddoo and Tracy Hall. Software process improvement motivators: An analysis using multidimensional scaling. *Empirical Software Engineering*, 7(2):93–114, June 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (elec-

tronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1015203013834.

Burkhardt:2002:OOP

[158] Jean-Marie Burkhardt, Françoise Détienne, and Susan Wiedenbeck. Object-oriented program comprehension: Effect of expertise, task and phase. *Empirical Software Engineering*, 7(2):115–156, June 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1015297914742.

Leung:2002:EME

[159] Hareton K. N. Leung. Estimating maintenance effort by analogy. *Empirical Software Engineering*, 7(2):157–175, June 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1015202115651.

Wieczorek:2002:ISC

[160] Isabella Wieczorek. Improved software cost estimation — a robust and interpretable modelling method and a comprehensive empirical investigation. *Empirical Software Engineering*, 7(2):177–180, June 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1015206216560.

Anonymous:2002:ISE

[161] Anonymous. 2002 International Symposium on Empirical Software Engineering (ISESE 2002). *Empirical Software Engineering*, 7(2):181–183, June 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1017493817468.

Anonymous:2002:Ib

[162] Anonymous. In this issue. *Empirical Software Engineering*, 7(3):191, September 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1016315814701.

Deligiannis:2002:REI

[163] Ignatios S. Deligiannis, Martin Shepperd, Steve Webster, and Manos Roumeliotis. A review of experimental investigations into object-oriented technology. *Empirical Software Engineering*, 7(3):193–231, September 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1016392131540.

Purchase:2002:EEA

[164] Helen C. Purchase, David Carrington, and Jo-Anne Allder. Empirical evaluation of aesthetics-based graph layout. *Empirical Software Engineering*, 7(3):233–255, September 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1016344215610.

Biffl:2002:URG

[165] Stefan Biffl and Walter J. Gutjahr. Using a reliability growth model to control software inspection. *Empir-*

ical Software Engineering, 7(3):257–284, September 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1016396232448`.

Anonymous:2002:Ic

[166] Anonymous. In this issue. *Empirical Software Engineering*, 7(4):295, December 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1020502803358`.

Khoshgoftaar:2002:UCF

[167] Taghi M. Khoshgoftaar, Xiaojing Yuan, Edward B. Allen, Wendell D. Jones, and John P. Hudepohl. Uncertain classification of fault-prone software modules. *Empirical Software Engineering*, 7(4):297–318, December 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1020511004267`.

Stringfellow:2002:EMS

[168] C. Stringfellow and A. Amschler Andrews. An empirical method for selecting software reliability growth models. *Empirical Software Engineering*, 7(4):319–343, December 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1020515105175`.

Laitenberger:2002:ICS

[169] Oliver Laitenberger, Thomas Beil, and Thilo Schwinn. An industrial case study to examine a non-traditional inspection implementation for requirements specifications. *Empirical Software Engineering*, 7(4):345–374, December 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1020519222014`.

Jorgensen:2002:CST

[170] Magne Jørgensen. Comments on *A Simulation Tool for Efficient Analogy Based Cost Estimation*, by L. Angelis and I. Stamelos, published in Empirical Software Engineering, 5, 35–68 (2000). *Empirical Software Engineering*, 7(4):375–376, December 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1020571206993`. See [97, 171].

Angelis:2002:RCM

[171] L. Angelis and I. Stamelos. Reply to comments by M. Jorgensen, on the paper: *A Simulation Tool for Efficient Analogy Based Cost Estimation* by L. Angelis and I. Stamelos, Published in Empirical Software Engineering, 5, 35–68 (2000). *Empirical Software Engineering*, 7(4):377–381, December 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1020527423831`. See [97, 170].

Dingsoyr:2002:KMM

[172] Torgeir Dingsøyr. Knowledge management in medium-sized software con-

sulting companies. *Empirical Software Engineering*, 7(4):383–386, December 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1020579408810`.

Dybaa:2002:ESP

[173] Tore Dybå. Enabling software process improvement: An investigation of the importance of organizational issues. *Empirical Software Engineering*, 7(4): 387–390, December 2002. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1020535725648`.

Anonymous:2003:I

[174] Anonymous. In this issue. *Empirical Software Engineering*, 8(1):5–6, March 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1021722114310`.

Beecham:2003:SPI

[175] Sarah Beecham, Tracy Hall, and Austen Rainer. Software process improvement problems in twelve software companies: An empirical analysis. *Empirical Software Engineering*, 8(1):7–42, March 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1021764731148`.

Hanebutte:2003:TSA

[176] Nadine Hanebutte, Carol S. Taylor, and Reiner R. Dumke. Techniques of successful application of factor analysis in software measurement. *Empirical Software Engineering*, 8(1):43–57, March 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1021716832057`.

Giraudo:2003:DCE

[177] Griselda Giraudo and Paolo Tonella. Designing and conducting an empirical study on test management automation. *Empirical Software Engineering*, 8(1):59–81, March 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1021720916127`.

Lindvall:2003:EBP

[178] Mikael Lindvall, Roseanne Tesoriero Tvedt, and Patricia Costa. An empirically-based process for software architecture evaluation. *Empirical Software Engineering*, 8(1):83–108, March 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1021772917036`.

Briand:2003:Ia

[179] Lionel Briand and Victor Basili. In this issue. *Empirical Software Engineering*, 8(2):115, June 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1023002327366`.

Pighin:2003:FTP

[180] Maurizio Pighin, Vili Podgorelec, and Peter Kokol. Fault-threshold prediction

with linear programming methodologies. *Empirical Software Engineering*, 8(2):117–138, June 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1023006528274`.

Stensrud:2003:FEI

[181] Erik Stensrud, Tron Foss, Barbara Kitchenham, and Ingunn Myrtveit. A further empirical investigation of the relationship between MRE and project size. *Empirical Software Engineering*, 8(2):139–161, June 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1023010612345`.

Mendes:2003:CSC

[182] Emilia Mendes, Ian Watson, Chris Triggs, Nile Mosley, and Steve Counsell. A comparative study of cost estimation models for Web hypermedia applications. *Empirical Software Engineering*, 8(2):163–196, June 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1023062629183`.

Succi:2003:IOS

[183] Giancarlo Succi, Witold Pedrycz, Milorad Stefanovic, and Barbara Russo. An investigation on the occurrence of service requests in commercial software applications. *Empirical Software Engineering*, 8(2):197–215, June 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1023014713253`.

Briand:2003:Ib

[184] Lionel Briand and Vic Basili. In this issue. *Empirical Software Engineering*, 8(3):223–224, September 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1024402810436`.

Antoniol:2003:OOF

[185] G. Antoniol, R. Fiutem, and C. Lokan. Object-oriented function points: An empirical validation. *Empirical Software Engineering*, 8(3):225–254, September 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1024472727275`.

Khoshgoftaar:2003:FPM

[186] Taghi M. Khoshgoftaar and Naeem Seliya. Fault prediction modeling for software quality estimation: Comparing commonly used techniques. *Empirical Software Engineering*, 8(3):255–283, September 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/A%3A1024424811345`.

Wohlin:2003:PAS

[187] Claes Wohlin and Anneliese Amschler Andrews. Prioritizing and assessing software project success factors and project characteristics using subjective data. *Empirical Software Engineering*, 8(3):285–308, September

2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1024476828183.

Thelin:2003:EEU

[188] Thomas Thelin. Empirical evaluations of usage-based reading and fault content estimation for software inspections. *Empirical Software Engineering*, 8(3):309–313, September 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1024428912254.

Briand:2003:Ic

[189] Lionel Briand and Vic Basili. In this issue. *Empirical Software Engineering*, 8(4):323–324, December 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1025302517098.

Khoshgoftaar:2003:ABP

[190] Taghi M. Khoshgoftaar and Naeem Seliya. Analogy-based practical classification rules for software quality estimation. *Empirical Software Engineering*, 8(4):325–350, December 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1025316301168.

Schach:2003:DDM

[191] Stephen R. Schach, Bo Jin, Liguo Yu, Gillian Z. Heller, and Jeff Offutt. Determining the distribution of maintenance categories: Survey versus measurement. *Empirical Software Engineering*, 8(4):351–365, December 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1025368318006.

Pfahl:2003:ERE

[192] Dietmar Pfahl, Oliver Laitenberger, Jörg Dorsch, and Günther Ruhe. An externally replicated experiment for evaluating the learning effectiveness of using simulations in software project management education. *Empirical Software Engineering*, 8(4):367–395, December 2003. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/A%3A1025320418915.

Jeffery:2004:I

[193] Ross Jeffery. In this issue. *Empirical Software Engineering*, 9(1–2):5, March 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000013532.34898.8c.

Juristo:2004:RYT

[194] Natalia Juristo, Ana M. Moreno, and Sira Vegas. Reviewing 25 years of testing technique experiments. *Empirical Software Engineering*, 9(1–2):7–44, March 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000013513.48963.1b.

Damian:2004:ICS

[195] Daniela Damian, Didar Zowghi, Lakshminarayanan Vaidyanathasamy, and Yogendra Pal. An industrial case study of immediate benefits of requirements engineering process improvement at the Australian Center for Unisys Software. *Empirical Software Engineering*, 9(1–2):45–75, March 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000013514.19567.ad`.

Thelin:2004:EUB

[196] Thomas Thelin, Per Runeson, Claes Wohlin, Thomas Olsson, and Carina Andersson. Evaluation of usage-based reading — conclusions after three experiments. *Empirical Software Engineering*, 9(1–2):77–110, March 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000013515.86806.d4`.

Shull:2004:KSI

[197] Forrest Shull, Manoel G. Mendoncça, Victor Basili, Jeffrey Carver, José C. Maldonado, Sandra Fabbri, Guilherme Horta Travassos, and Maria Cristina Ferreira. Knowledge-sharing issues in experimental software engineering. *Empirical Software Engineering*, 9(1–2):111–137, March 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000013516.80487.33`.

Anonymous:2004:I

[198] Anonymous. In this issue. *Empirical Software Engineering*, 9(3):147–148, September 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000027842.64214.10`.

Vokac:2004:CEC

[199] Marek Vokáč, Walter Tichy, Dag I. K. SjØberg, Erik Arisholm, and Magne Aldrin. A controlled experiment comparing the maintainability of programs designed with and without design patterns — a replication in a real programming environment. *Empirical Software Engineering*, 9(3):149–195, September 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000027778.69251.1f`.

Chen:2004:OSC

[200] Kai Chen, Stephen R. Schach, Liguo Yu, Jeff Offutt, and Gillian Z. Heller. Open-source change logs. *Empirical Software Engineering*, 9(3):197–210, September 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000027779.70556.d0`.

Wohlin:2004:IDS

[201] Claes Wohlin. Are individual differences in software development performance possible to capture using a quantitative survey? *Empirical Software Engineering*, 9(3):211–

228, September 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000027780.08194.b0.

Khoshgoftaar:2004:CAS

[202] Taghi M. Khoshgoftaar and Naeem Seliya. Comparative assessment of software quality classification techniques: An empirical case study. *Empirical Software Engineering*, 9(3):229–257, September 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000027781.18360.9b.

Carver:2004:IBE

[203] Jeff Carver. The impact of background and experience on software inspections. *Empirical Software Engineering*, 9(3):259–262, September 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000027786.04555.97.

Petre:2004:FHS

[204] Marian Petre, David Budgen, and Jean Scholtz. A focus on the human side of software engineering. *Empirical Software Engineering*, 9(4):271–274, December 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000039879.61459.55.

Ahonen:2004:IOM

[205] Jarmo J. Ahonen, Tuukka Junttila, and Markku Sakkinen. Impacts of the organizational model on testing: Three industrial cases. *Empirical Software Engineering*, 9(4):275–296, December 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000039880.99096.af.

Jorgensen:2004:RMS

[206] Magne Jørgensen. Regression models of software development effort estimation accuracy and bias. *Empirical Software Engineering*, 9(4):297–314, December 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000039881.57613.cb.

Molokken-Ostvold:2004:GPS

[207] Kjetil Moløkken-Østvold and Magne Jørgensen. Group processes in software effort estimation. *Empirical Software Engineering*, 9(4):315–334, December 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000039882.39206.5a.

Muller:2004:RAP

[208] Matthias M. Müller. Are reviews an alternative to pair programming? *Empirical Software Engineering*, 9(4):335–351, December 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.

com/accesspage/article/10.1023/B%3AEMSE.0000039883.47173.39.

Sharp:2004:ESX

[209] Helen Sharp and Hugh Robinson. An ethnographic study of XP practice. *Empirical Software Engineering*, 9(4):353–375, December 2004. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000039884.79385.54.

Anonymous:2005:Ia

[210] Anonymous. In this issue. *Empirical Software Engineering*, 10(1):5–6, January 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000048338.96485.38.

Molokken:2005:EEW

[211] Kjetil Moløkken and Magne Jørgensen. Expert estimation of Web-development projects: Are software professionals in technical roles more optimistic than those in non-technical roles? *Empirical Software Engineering*, 10(1):7–30, January 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000048321.46871.2e.

Kajko-Mattsson:2005:SDP

[212] Mira Kajko-Mattsson. A survey of documentation practice within corrective maintenance. *Empirical Software Engineering*, 10(1):31–55, January 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3ALIDA.0000048322.42751.ca.

Reinhartz-Berger:2005:OVU

[213] Iris Reinhartz-Berger and Dov Dori. OPM vs. UML–Experimenting with comprehension and construction of Web application models. *Empirical Software Engineering*, 10(1):57–80, January 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000048323.40484.e0.

Succi:2005:EED

[214] Giancarlo Succi, Witold Pedrycz, Snezana Djokic, Paolo Zuliani, and Barbara Russo. An empirical exploration of the distributions of the Chidamber and Kemerer object-oriented metrics suite. *Empirical Software Engineering*, 10(1):81–104, January 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1023/B%3AEMSE.0000048324.12188.a2.

Briand:2005:I

[215] Lionel Briand and Vic Basili. In this issue. *Empirical Software Engineering*, 10(2):111–112, April 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-004-6188-5.

Karahasanoviae:2005:CFD

[216] Amela Karahasanoviæ, Bente Anda, Erik Arisholm, Siw Elisabeth Hove,

Magne Jørgensen, Dag I. K. Sjøberg, and Ray Welland. Collecting feedback during software engineering experiments. *Empirical Software Engineering*, 10(2):113–147, April 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-004-6189-4`.

Svahnberg:2005:IMI

[217] Mikael Svahnberg and Claes Wohlin. An investigation of a method for identifying a software architecture candidate with respect to quality attributes. *Empirical Software Engineering*, 10(2): 149–181, April 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-004-6190-y`.

Khoshgoftaar:2005:ANT

[218] Taghi M. Khoshgoftaar, Naeem Seliya, and Kehan Gao. Assessment of a new three-group software quality classification technique: An empirical case study. *Empirical Software Engineering*, 10(2):183–218, April 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-004-6191-x`.

McDonald:2005:IPP

[219] James McDonald. The impact of project planning team experience on software project cost estimates. *Empirical Software Engineering*, 10(2): 219–234, April 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-004-6192-9`.

Song:2005:SNS

[220] Qinbao Song, Martin Shepperd, and Michelle Cartwright. A short note on safest default missingness mechanism assumptions. *Empirical Software Engineering*, 10(2):235–243, April 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-004-6193-8`.

Anonymous:2005:Ib

[221] Anonymous. In this issue. *Empirical Software Engineering*, 10(3): 251–253, July 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-005-1286-6`.

Damian:2005:RED

[222] Daniela Damian, James Chisan, Lakshminarayanan Vaidyanathasamy, and Yogendra Pal. Requirements engineering and downstream software development: Findings from a case study. *Empirical Software Engineering*, 10(3): 255–283, July 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-005-1288-4`.

Anda:2005:IRU

[223] Bente Anda and Dag I. K. Sjøberg. Investigating the role of use cases in the construction of class diagrams. *Empirical Software Engineering*, 10(3): 285–309, July 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-

7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-005-1289-3.

Lethbridge:2005:SSE

[224] Timothy C. Lethbridge, Susan Elliott Sim, and Janice Singer. Studying software engineers: Data collection techniques for software field studies. *Empirical Software Engineering*, 10(3): 311–341, July 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-005-1290-x.

Sharp:2005:UMA

[225] Helen Sharp, Mark Woodman, and Fiona Hovenden. Using metaphor to analyse qualitative data: Vulcans and humans in software development. *Empirical Software Engineering*, 10(3): 343–365, July 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-005-1451-y.

Zettel:2005:MSC

[226] Jörg Zettel. Methodology support in CASE tools and its impact on individual acceptance and use: A controlled experiment. *Empirical Software Engineering*, 10(3):367–394, July 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-005-1287-5.

Anonymous:2005:Ic

[227] Anonymous. In this issue. *Empirical Software Engineering*, 10(4):403–404, October 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-005-3860-3.

Do:2005:SCE

[228] Hyunsook Do, Sebastian Elbaum, and Gregg Rothermel. Supporting controlled experimentation with testing techniques: An infrastructure and its potential impact. *Empirical Software Engineering*, 10(4):405–435, October 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-005-3861-2.

Vegas:2005:CSS

[229] Sira Vegas and Victor Basili. A characterisation schema for software testing techniques. *Empirical Software Engineering*, 10(4):437–466, October 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-005-3862-1.

Verelst:2005:ILA

[230] Jan Verelst. The influence of the level of abstraction on the evolvability of conceptual models of information systems. *Empirical Software Engineering*, 10(4):467–494, October 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-005-3863-0.

Takagi:2005:EAC

[231] Yasunari Takagi, Osamu Mizuno, and Tohru Kikuno. An empirical approach to characterizing risky software projects based on logistic regression analysis. *Empirical Software Engineering*, 10(4):495–515, October 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-005-3864-z`.

Segal:2005:WSE

[232] Judith Segal. When software engineers met research scientists: A case study. *Empirical Software Engineering*, 10(4): 517–536, October 2005. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-005-3865-y`.

Anonymous:2006:Ia

[233] Anonymous. In this issue. *Empirical Software Engineering*, 11(1):3–4, March 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-5963-x`.

Ellims:2006:EUT

[234] Michael Ellims, James Bridges, and Darrel C. Ince. The economics of unit testing. *Empirical Software Engineering*, 11(1):5–31, March 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-5964-9`.

Do:2006:PJT

[235] Hyunsook Do, Gregg Rothermel, and Alex Kinneer. Prioritizing JUnit test cases: An empirical assessment and cost–benefits analysis. *Empirical Software Engineering*, 11(1):33–70, March 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-5965-8`.

Goseva-Popstojanova:2006:ECS

[236] Katerina Goševa-Popstojanova, Ajay Deep Singh, Sunil Mazimdar, and Fengbin Li. Empirical characterization of session-based workload and reliability for Web servers. *Empirical Software Engineering*, 11(1):71–117, March 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-5966-7`.

Maldonado:2006:PBR

[237] José C. Maldonado, Jeffrey Carver, Forrest Shull, Sandra Fabbri, Emerson Dória, Luciana Martimiano, Manoel Mendonça, and Victor Basili. Perspective-Based Reading: A replicated experiment focused on individual reviewer effectiveness. *Empirical Software Engineering*, 11(1): 119–142, March 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-5967-6`.

Syed-Abdullah:2006:IAM

[238] Sharifah Syed-Abdullah, Mike Holcombe, and Marian Gheorge. The

impact of an Agile methodology on the well being of development teams. *Empirical Software Engineering*, 11(1): 143–167, March 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-5968-5`.

Anonymous:2006:Ib

[239] Anonymous. In this issue. *Empirical Software Engineering*, 11(2): 171–172, June 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-6400-x`.

Sinha:2006:EEH

[240] Avik Sinha and Carol Smidts. An experimental evaluation of a higher-ordered-typed-functional specification-based test-generation technique. *Empirical Software Engineering*, 11(2): 173–202, June 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-6401-9`.

Karlstrom:2006:IAS

[241] Daniel Karlström and Per Runeson. Integrating Agile software development into stage-gate managed product development. *Empirical Software Engineering*, 11(2):203–225, June 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-6402-8`.

Bunse:2006:UPR

[242] Christian Bunse. Using patterns for the refinement and translation of UML models: A controlled experiment. *Empirical Software Engineering*, 11(2): 227–267, June 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-6403-7`.

Sfetsos:2006:IEP

[243] Panagiotis Sfetsos, Lefteris Angelis, and Ioannis Stamelos. Investigating the Extreme programming system — an empirical study. *Empirical Software Engineering*, 11(2): 269–301, June 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-6404-6`.

ochDag:2006:ELT

[244] Johan Natt och Dag, Thomas Thelin, and Björn Regnell. An experiment on linguistic tool support for consolidation of requirements from multiple sources in market-driven product development. *Empirical Software Engineering*, 11(2): 303–329, June 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-6405-5`.

Anonymous:2006:ESI

[245] Anonymous. EMSE special issue from ICSM and metrics. *Empirical Software Engineering*, 11(3):333–334, September 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.`

springer.com/accesspage/article/10.1007/s10664-006-9003-7.

Hassan:2006:RDH

[246] Ahmed E. Hassan and Richard C. Holt. Replaying development history to assess the effectiveness of change propagation tools. *Empirical Software Engineering*, 11(3):335–367, September 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9006-4.

German:2006:ESF

[247] Daniel M. German. An empirical study of fine-grained software modifications. *Empirical Software Engineering*, 11(3):369–393, September 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9004-6.

Mantyla:2006:SES

[248] Mika V. Mäntylä and Casper Lassenius. Subjective evaluation of software evolvability using code smells: An empirical study. *Empirical Software Engineering*, 11(3):395–431, September 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9002-8.

Li:2006:ESV

[249] Jingyue Li, Finn Olav Bjørnson, Reidar Conradi, and Vigdis B. Kampenes. An empirical study of variations in COTS-based software development processes in the Norwegian IT industry. *Empirical Software Engineering*, 11(3):433–461, September 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9005-5.

Jonsson:2006:BNN

[250] Per Jönsson and Claes Wohlin. Benchmarking k-nearest neighbour imputation with homogeneous Likert data. *Empirical Software Engineering*, 11(3):??, September 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9001-9.

Briand:2006:I

[251] Lionel Briand and Victor Basili. In this issue. *Empirical Software Engineering*, 11(4):491–492, December 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9019-z.

Hayes:2006:IVA

[252] Jane Huffman Hayes and Jeff Offutt. Input validation analysis and testing. *Empirical Software Engineering*, 11(4):493–522, December 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9025-1.

Carver:2006:COT

[253] Jeffrey Carver, Forrest Shull, and Victor Basili. Can observational techniques help novices overcome the software inspection learning curve? An empirical investigation. *Empirical Software Engineering*, 11(4):523–539, De-

cember 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9021-5.

Subramanian:2006:ESE

[254] Girish H. Subramanian, Parag C. Pendharkar, and Mary Wallace. An empirical study of the effect of complexity, platform, and program type on software development effort of business applications. *Empirical Software Engineering*, 11(4):541–553, December 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9023-3.

Anda:2006:EIU

[255] Bente Anda, Kai Hansen, Ingolf Gullesen, and Hanne Kristin Thorsen. Experiences from introducing UML-based development in a large safety-critical project. *Empirical Software Engineering*, 11(4):555–581, December 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9020-6.

Grindal:2006:ECS

[256] Mats Grindal, Birgitta Lindström, Jeff Offutt, and Sten F. Andler. An evaluation of combination strategies for test case selection. *Empirical Software Engineering*, 11(4):583–611, December 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9024-2.

Anonymous:2006:ESE

[257] Anonymous. Empirical software engineering: Industrial experience reports. *Empirical Software Engineering*, 11(4):613, December 2006. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9022-4.

Briand:2007:Ia

[258] Lionel Briand and Victor Basili. In this issue. *Empirical Software Engineering*, 12(1):1–2, February 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9035-z.

Karlsson:2007:PWC

[259] Lena Karlsson, Thomas Thelin, Björn Regnell, Patrik Berander, and Claes Wohlin. Pair-wise comparisons versus planning game partitioning — experiments on requirements prioritisation techniques. *Empirical Software Engineering*, 12(1):3–33, February 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-7240-4.

Waeselynck:2007:SAA

[260] Hélène Waeselynck, Pascale Thévenod-Fosse, and Olfa Abdellatif-Kaddour. Simulated annealing applied to test generation: landscape characterization and stopping criteria. *Empirical Software Engineering*, 12(1):35–63, February 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.

springer.com/accesspage/article/10.1007/s10664-006-7551-5.

Li:2007:FMS

[261] Jingzhou Li, Guenther Ruhe, Ahmed Al-Emran, and Michael M. Richter. A flexible method for software effort estimation by analogy. *Empirical Software Engineering*, 12(1):65–106, February 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-7552-4.

Basili:2007:PUE

[262] Victor R. Basili, Marvin V. Zelkowitz, Dag I. K. Sjøberg, Philip Johnson, and Anthony J. Cowling. Protocols in the use of empirical software engineering artifacts. *Empirical Software Engineering*, 12(1):107–119, February 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9030-4.

Briand:2007:Ib

[263] Lionel Briand and Vic Basili. In this issue. *Empirical Software Engineering*, 12(2):121–122, April 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9039-3.

Yu:2007:UCC

[264] Liguo Yu. Understanding component co-evolution with a study on Linux. *Empirical Software Engineering*, 12(2):123–141, April 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9000-x.

Zhang:2007:SED

[265] Xiangyu Zhang, Neelam Gupta, and Rajiv Gupta. A study of effectiveness of dynamic slicing in locating real faults. *Empirical Software Engineering*, 12(2):143–160, April 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9007-3.

Xiao:2007:EEO

[266] Man Xiao, Mohamed El-Attar, Marek Reformat, and James Miller. Empirical evaluation of optimization algorithms when used in goal-oriented automated test data generation techniques. *Empirical Software Engineering*, 12(2):183–239, April 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9026-0.

Andersson:2007:RES

[267] Carina Andersson. A replicated empirical study of a selection method for software reliability growth models. *Empirical Software Engineering*, 12(2):??, April 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9018-0.

Briand:2007:Ic

[268] Lionel Briand and Vic Basili. In this issue. *Empirical Software Engineering*, 12(3):241–242, June 2007. CODEN ES-

ENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9041-9.

Kirk:2007:IAP

[269] Douglas Kirk, Marc Roper, and Murray Wood. Identifying and addressing problems in object-oriented framework reuse. *Empirical Software Engineering*, 12(3):243–274, June 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9027-z.

Counsell:2007:QMD

[270] Steve Counsell, George Loizou, and Rajaa Najjar. Quality of manual data collection in Java software: an empirical investigation. *Empirical Software Engineering*, 12(3):275–293, June 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9028-y.

Moser:2007:EAC

[271] Raimund Moser, Barbara Russo, and Giancarlo Succi. Empirical analysis on the correlation between GCC compiler warnings and revision numbers of source files in five industrial software projects. *Empirical Software Engineering*, 12(3):295–310, June 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9029-x.

Milewski:2007:GTE

[272] Allen E. Milewski. Global and task effects in information-seeking among software engineers. *Empirical Software Engineering*, 12(3):311–326, June 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9036-6.

Briand:2007:Id

[273] Lionel Briand and Victor Basili. In this issue. *Empirical Software Engineering*, 12(4):327–329, August 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9046-4.

Li:2007:PAT

[274] Ping Li, Toan Huynh, Marek Reformat, and James Miller. A practical approach to testing GUI systems. *Empirical Software Engineering*, 12(4):331–357, August 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9031-3.

Lawrie:2007:QIQ

[275] Dawn Lawrie, Henry Feild, and David Binkley. Quantifying identifier quality: an analysis of trends. *Empirical Software Engineering*, 12(4):359–388, August 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-006-9032-2.

Melton:2007:ESC

[276] Hayden Melton and Ewan Tempero. An empirical study of cycles among classes in Java. *Empirical Software Engineering*, 12(4):389–415, August 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-9033-1`.

Lindvall:2007:EST

[277] Mikael Lindvall, Ioana Rus, Paolo Donzelli, Atif Memon, Marvin Zelkowitz, Aysu Betin-Can, Tevfik Bultan, Chris Ackermann, Bettina Anders, Sima Asgari, Victor Basili, Lorin Hochstein, Jörg Fellmann, Forrest Shull, Roseanne Tvedt, and et al. Experimenting with software testbeds for evaluating new technologies. *Empirical Software Engineering*, 12(4):417–444, August 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-006-9034-0`.

Briand:2007:Ie

[278] Lionel Briand and Victor Basili. In this issue. *Empirical Software Engineering*, 12(5):445–446, October 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-007-9050-8`.

Elbaum:2007:TAP

[279] Sebastian Elbaum, Satya Kanduri, and Anneliese Andrews. Trace anomalies as precursors of field failures: an empirical study. *Empirical Software Engineering*, 12(5):447–469, October 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-007-9042-8`.

Mohagheghi:2007:QPE

[280] Parastoo Mohagheghi and Reidar Conradi. Quality, productivity and economic benefits of software reuse: a review of industrial studies. *Empirical Software Engineering*, 12(5):471–516, October 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-007-9040-x`.

Genero:2007:BMB

[281] Marcela Genero, Esperanza Manso, Aaron Visaggio, Gerardo Canfora, and Mario Piattini. Building measure-based prediction models for UML class diagram maintainability. *Empirical Software Engineering*, 12(5):517–549, October 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-007-9038-4`.

Tonella:2007:ESR

[282] Paolo Tonella, Marco Torchiano, Bart Du Bois, and Tarja Systä. Empirical studies in reverse engineering: state of the art and future trends. *Empirical Software Engineering*, 12(5):551–571, October 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-007-9037-5`.

Briand:2007:If

[283] Lionel Briand and Victor Basili. In this issue. *Empirical Software Engineering*, 12(6):573–574, December 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9056-2.

Yeh:2007:ESR

[284] Dowming Yeh, Pei chen Sun, William Chu, Chien-Lung Lin, and Hongji Yang. An empirical study of a reverse engineering method for the aggregation relationship based on operation propagation. *Empirical Software Engineering*, 12(6):575–592, December 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9043-7.

Muller:2007:EET

[285] Matthias M. Müller and Andreas Höfer. The effect of experience on the test-driven development process. *Empirical Software Engineering*, 12(6):593–615, December 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9048-2.

Wojcicki:2007:MIG

[286] Margaret A. Wojcicki and Paul Strooper. Maximising the information gained from a study of static analysis technologies for concurrent software. *Empirical Software Engineering*, 12(6):617–645, December 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9044-6.

Kommeren:2007:PEG

[287] Rob Kommeren and Päivi Parviainen. Philips experiences in global distributed software development. *Empirical Software Engineering*, 12(6):647–660, December 2007. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9047-3.

Maldonado:2008:I

[288] José Maldonado and Claes Wohlin. In this issue. *Empirical Software Engineering*, 13(1):1–2, February 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9059-z.

Mendes:2008:RSC

[289] Emilia Mendes and Chris Lokan. Replicating studies on cross- vs single-company effort models using the ISBSG database. *Empirical Software Engineering*, 13(1):3–37, February 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9045-5.

Babar:2008:CDF

[290] Muhammad Ali Babar, Barbara Kitchenham, and Ross Jeffery. Comparing distributed and face-to-face meetings for software architecture evaluation: A controlled experiment. *Empirical Software Engineering*, 13(1):

39–62, February 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9052-6.

Li:2008:AAW

[291] Jingzhou Li and Guenther Ruhe. Analysis of attribute weighting heuristics for analogy-based software effort estimation method AQUA$^+$. *Empirical Software Engineering*, 13(1):63–96, February 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9054-4.

Kitchenham:2008:EGR

[292] Barbara Kitchenham, Hiyam Al-Khilidar, Muhammed Ali Babar, Mike Berry, Karl Cox, Jacky Keung, Felicia Kurniawati, Mark Staples, He Zhang, and Liming Zhu. Evaluating guidelines for reporting empirical software engineering studies. *Empirical Software Engineering*, 13(1):97–121, February 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9053-5.

Briand:2008:Ia

[293] Lionel Briand and Vic Basili. In this issue. *Empirical Software Engineering*, 13(2):123–124, April 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9066-8.

Jung:2008:ICP

[294] Ho-Won Jung and Dennis R. Goldenson. The internal consistency and precedence of key process areas in the capability maturity model for software. *Empirical Software Engineering*, 13(2):125–146, April 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9049-1.

Sentas:2008:SFA

[295] Panagiotis Sentas, Lefteris Angelis, and Ioannis Stamelos. A statistical framework for analyzing the duration of software projects. *Empirical Software Engineering*, 13(2):147–184, April 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9051-7.

Shull:2008:RRE

[296] Forrest J. Shull, Jeffrey C. Carver, Sira Vegas, and Natalia Juristo. The role of replications in empirical software engineering. *Empirical Software Engineering*, 13(2):211–218, April 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9060-1.

Kitchenham:2008:RRE

[297] Barbara Kitchenham. The role of replications in empirical software engineering — a word of warning. *Empirical Software Engineering*, 13(2):219–221, April 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-

7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9061-0.

Miller:2008:TBK

[298] James Miller. Triangulation as a basis for knowledge discovery in software engineering. *Empirical Software Engineering*, 13(2):223–228, April 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9063-y.

Crespo:2008:BSR

[299] Adalberto Nobiato Crespo, Mario Jino, Alberto Pasquini, and José Carlos Maldonado. A binomial software reliability model based on coverage of structural testing criteria. *Empirical Software Engineering*, 13(2):??, April 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9055-3.

Briand:2008:Ib

[300] Lionel Briand and Victor Basili. In this issue. *Empirical Software Engineering*, 13(3):229–230, June 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9070-z.

Dittrich:2008:CMD

[301] Yvonne Dittrich, Kari Rönkkö, Jeanette Eriksson, Christina Hansson, and Olle Lindeberg. Cooperative method development. *Empirical Software Engineering*, 13(3):231–260, June 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9057-1.

Moses:2008:TCM

[302] John Moses and Malcolm Farrow. Tests for consistent measurement of external subjective software quality attributes. *Empirical Software Engineering*, 13(3):261–287, June 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-007-9058-0.

Nagappan:2008:RQI

[303] Nachiappan Nagappan, E. Michael Maximilien, Thirumalesh Bhat, and Laurie Williams. Realizing quality improvement through test driven development: results and experiences of four industrial teams. *Empirical Software Engineering*, 13(3):289–302, June 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9062-z.

Pikkarainen:2008:IAP

[304] M. Pikkarainen, J. Haikara, O. Salo, P. Abrahamsson, and J. Still. The impact of Agile practices on communication in software development. *Empirical Software Engineering*, 13(3):303–337, June 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9065-9.

Briand:2008:Ic

[305] Lionel Briand and Victor Basili. In this issue. *Empirical Software Engineering*, 13(4):339–342, August 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9085-5`.

Hennessy:2008:AER

[306] Mark Hennessy and James F. Power. Analysing the effectiveness of rule-coverage as a reduction criterion for test suites of grammar-based software. *Empirical Software Engineering*, 13(4):343–368, August 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9067-7`.

Budgen:2008:PSE

[307] David Budgen, Barbara A. Kitchenham, Stuart M. Charters, Mark Turner, Pearl Brereton, and Stephen G. Linkman. Presenting software engineering results using structured abstracts: a randomised experiment. *Empirical Software Engineering*, 13(4):435–468, August 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9075-7`.

Acuna:2008:TUR

[308] Silvia T. Acuña, Marta Gómez, and Natalia Juristo. Towards understanding the relationship between team climate and software quality — a quasi-experimental study. *Empirical Software Engineering*, 13(4):??, August 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9074-8`.

Masri:2008:EEC

[309] Wes Masri. Exploiting the empirical characteristics of program dependences for improved forward computation of dynamic slices. *Empirical Software Engineering*, 13(4):??, August 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9071-y`.

Menzies:2008:ESI

[310] Tim Menzies. Editorial, special issue, repeatable experiments in software engineering. *Empirical Software Engineering*, 13(5):469–471, October 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9087-3`.

Weyuker:2008:DTM

[311] Elaine J. Weyuker, Thomas J. Ostrand, and Robert M. Bell. Do too many cooks spoil the broth? Using the number of developers to enhance defect prediction models. *Empirical Software Engineering*, 13(5):539–559, October 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9082-8`.

Jiang:2008:TEF

[312] Yue Jiang, Bojan Cukic, and Yan Ma. Techniques for evaluating fault prediction models. *Empirical Software Engineering*, 13(5):561–595, October 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9079-3`.

Fenton:2008:EEL

[313] Norman Fenton, Martin Neil, William Marsh, Peter Hearty, Łukasz Radliński, and Paul Krause. On the effectiveness of early life cycle defect prediction with Bayesian nets. *Empirical Software Engineering*, 13(5):??, October 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9072-x`.

Koru:2008:TRD

[314] A. Güneş Koru, Khaled El Emam, Dongsong Zhang, Hongfang Liu, and Divya Mathew. Theory of relative defect proneness. *Empirical Software Engineering*, 13(5):??, October 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9080-x`.

Sim:2008:GEI

[315] Susan Elliott Sim and Massimiliano Di Penta. Guest Editors' introduction: special issue from the 13th Working Conference on Reverse Engineering (WCRE 2006). *Empirical Software Engineering*, 13(6):597–600, December 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9098-0`.

Falke:2008:EEC

[316] Raimar Falke, Pierre Frenzel, and Rainer Koschke. Empirical evaluation of clone detection using syntax suffix trees. *Empirical Software Engineering*, 13(6):601–643, December 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9073-9`.

Knodel:2008:ERG

[317] Jens Knodel, Dirk Muthig, and Matthias Naab. An experiment on the role of graphical elements in architecture visualization. *Empirical Software Engineering*, 13(6):693–726, December 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9069-5`.

Lormans:2008:ICS

[318] Marco Lormans, Arie van Deursen, and Hans-Gerhard Gross. An industrial case study in reconstructing requirements views. *Empirical Software Engineering*, 13(6):727–760, December 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-008-9078-4.pdf`.

Kapser:2008:CCH

[319] Cory J. Kapser and Michael W. Godfrey. "Cloning considered harmful" considered harmful: patterns of cloning in software. *Empirical Software Engineering*, 13(6):??, December 2008. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9076-6`.

Etzkorn:2009:SII

[320] Letha Etzkorn and Tim Menzies. Special issue on information retrieval for program comprehension. *Empirical Software Engineering*, 14(1): 1–4, February 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-008-9097-1.pdf`.

Poshyvanyk:2009:UIR

[321] Denys Poshyvanyk, Andrian Marcus, Rudolf Ferenc, and Tibor Gyimóthy. Using information retrieval based coupling measures for impact analysis. *Empirical Software Engineering*, 14(1): 5–32, February 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9088-2`.

Tairas:2009:IRP

[322] Robert Tairas and Jeff Gray. An information retrieval process to aid in the analysis of code clones. *Empirical Software Engineering*, 14(1): 33–56, February 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9089-1`.

DeLucia:2009:AIB

[323] Andrea De Lucia, Rocco Oliveto, and Genoveffa Tortora. Assessing IR-based traceability recovery tools through controlled experiments. *Empirical Software Engineering*, 14(1):57–92, February 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9090-8`.

Cleary:2009:EAI

[324] Brendan Cleary, Chris Exton, Jim Buckley, and Michael English. An empirical analysis of information retrieval based concept location techniques in software comprehension. *Empirical Software Engineering*, 14(1):93–130, February 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9095-3`.

Gupta:2009:CSC

[325] Anita Gupta, Jingyue Li, Reidar Conradi, Harald Rønneberg, and Einar Landre. A case study comparing defect profiles of a reused framework and of applications reusing it. *Empirical Software Engineering*, 14(2): 227–255, April 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9081-9`.

Hewett:2009:MSD

[326] Rattikorn Hewett and Phongphun Kijsanayothin. On modeling soft-

ware defect repair time. *Empirical Software Engineering*, 14(2):??, April 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9064-x`.

Runeson:2009:GCR

[327] Per Runeson and Martin Höst. Guidelines for conducting and reporting case study research in software engineering. *Empirical Software Engineering*, 14(2):??, April 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-008-9102-8.pdf`.

Sfetsos:2009:EIP

[328] Panagiotis Sfetsos, Ioannis Stamelos, Lefteris Angelis, and Ignatios Deligiannis. An experimental investigation of personality types impact on pair effectiveness in pair programming. *Empirical Software Engineering*, 14(2):??, April 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9093-5`.

Diehl:2009:GEI

[329] Stephan Diehl, Harald C. Gall, and Ahmed E. Hassan. Guest Editors' introduction: special issue on mining software repositories. *Empirical Software Engineering*, 14(3):257–261, June 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-009-9110-3.pdf`.

Gonzalez-Barahona:2009:MLS

[330] Jesus M. Gonzalez-Barahona, Gregorio Robles, Martin Michlmayr, Juan José Amor, and Daniel M. German. Macro-level software evolution: a case study of a large software compilation. *Empirical Software Engineering*, 14(3):262–285, June 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-008-9100-x.pdf`.

Pan:2009:TUB

[331] Kai Pan, Sunghun Kim, and E. James Whitehead, Jr. Toward an understanding of bug fix patterns. *Empirical Software Engineering*, 14(3):286–315, June 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9077-5`.

Voinea:2009:VQA

[332] Lucian Voinea and Alexandru Telea. Visual querying and analysis of large software repositories. *Empirical Software Engineering*, 14(3):316–340, June 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-008-9068-6`.

Smith:2009:GAA

[333] Ben H. Smith and Laurie Williams. On guiding the augmentation of an automated test suite via mutation analysis. *Empirical Software Engineering*, 14(3):341–369, June 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.`

springer.com/accesspage/article/10.1007/s10664-008-9083-7.

Huynh:2009:AVE

[334] Toan Huynh and James Miller. Another viewpoint on "Evaluating web software reliability based on workload and failure data extracted from server logs". *Empirical Software Engineering*, 14(4):371–396, August 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9084-6.

vonWangenheim:2009:EEE

[335] Christiane Gresse von Wangenheim, Marcello Thiry, and Djone Kochanski. Empirical evaluation of an educational game on software measurement. *Empirical Software Engineering*, 14(4):418–452, August 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9092-6.

Lee:2009:SAE

[336] Jihyun Lee, Sungwon Kang, and Chang-Ki Kim. Software architecture evaluation methods based on cost benefit analysis and quantitative decision making. *Empirical Software Engineering*, 14(4):453–475, August 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9094-4.

Koch:2009:EES

[337] Stefan Koch. Exploring the effects of SourceForge.net coordination and communication tools on the efficiency of open source projects using data envelopment analysis. *Empirical Software Engineering*, 14(4):??, August 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9086-4.

Dieste:2009:DSS

[338] Oscar Dieste, Anna Grimán, and Natalia Juristo. Developing search strategies for detecting relevant experiments. *Empirical Software Engineering*, 14(5):513–539, October 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9091-7.

Turhan:2009:RVC

[339] Burak Turhan, Tim Menzies, Ayşe B. Bener, and Justin Di Stefano. On the relative value of cross-company and within-company data for defect prediction. *Empirical Software Engineering*, 14(5):540–578, October 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9103-7.

Lam:2009:EDA

[340] Alexander Lam and Barry Boehm. Experiences in developing and applying a software engineering technology testbed. *Empirical Software Engineering*, 14(5):579–601, October 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.

com/accesspage/article/10.1007/s10664-008-9096-2.

El-Attar:2009:SBE

[341] Mohamed El-Attar and James Miller. A subject-based empirical evaluation of SSUCD's performance in reducing inconsistencies in use case models. *Empirical Software Engineering*, 14(5):??, October 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9101-9.

Li:2009:SNL

[342] Y. F. Li, M. Xie, and T. N. Goh. A study of the non-linear adjustment for analogy based software cost estimation. *Empirical Software Engineering*, 14(6):603–643, December 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-008-9104-6.

Herrmann:2009:PCR

[343] Andrea Herrmann and Barbara Paech. Practical challenges of requirements prioritization based on risk estimation. *Empirical Software Engineering*, 14(6):644–684, December 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9105-0.

Cruz-Lemus:2009:AUU

[344] José A. Cruz-Lemus, Marcela Genero, M. Esperanza Manso, Sandro Morasca, and Mario Piattini. Assessing the understandability of UML statechart diagrams with composite states — a family of empirical studies. *Empirical Software Engineering*, 14(6):685–719, December 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9106-z.

Gulesir:2009:EET

[345] Gürcan Güleşir, Klaas van den Berg, Lodewijk Bergmans, and Mehmet Akşit. Experimental evaluation of a tool for the verification and transformation of source code in event-driven systems. *Empirical Software Engineering*, 14(6):720–777, December 2009. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-009-9107-y.pdf.

Thummalapenta:2010:ESM

[346] Suresh Thummalapenta, Luigi Cerulo, Lerina Aversano, and Massimiliano Di Penta. An empirical study on the maintenance of source code clones. *Empirical Software Engineering*, 15(1):1–34, February 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9108-x.

Carver:2010:CIS

[347] Jeffrey C. Carver, Letizia Jaccheri, Sandro Morasca, and Forrest Shull. A checklist for integrating student empirical studies with research and teaching goals. *Empirical Software Engineering*, 15(1):35–59, February 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http:

//link.springer.com/accesspage/article/10.1007/s10664-009-9109-9.

Azzeh:2010:FGR

[348] Mohammad Azzeh, Daniel Neagu, and Peter I. Cowling. Fuzzy grey relational analysis for software effort estimation. *Empirical Software Engineering*, 15(1): 60–90, February 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9113-0.

Smite:2010:EEG

[349] Darja Šmite, Claes Wohlin, Tony Gorschek, and Robert Feldt. Empirical evidence in global software engineering: a systematic review. *Empirical Software Engineering*, 15(1):91–118, February 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9123-y.

Zou:2010:IAR

[350] Xuchang Zou, Raffaella Settimi, and Jane Cleland-Huang. Improving automated requirements trace retrieval: a study of term-based enhancement methods. *Empirical Software Engineering*, 15(2):119–146, April 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9114-z.

Hata:2010:FPM

[351] Hideaki Hata, Osamu Mizuno, and Tohru Kikuno. Fault-prone module detection using large-scale text features based on spam filtering. *Empirical Software Engineering*, 15(2): 147–165, April 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9117-9.

Benestad:2010:UCD

[352] Hans Christian Benestad, Bente Anda, and Erik Arisholm. Understanding cost drivers of software evolution: a quantitative and qualitative investigation of change effort in two evolving software systems. *Empirical Software Engineering*, 15(2):166–203, April 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9118-8.

Lee:2010:DAP

[353] Seiyoung Lee and Hwan-Seung Yong. Distributed Agile: project management in a global environment. *Empirical Software Engineering*, 15(2): 204–217, April 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9119-7.

Hackbarth:2010:ASS

[354] Randy L. Hackbarth, Audris Mockus, John Douglas Palframan, and David M. Weiss. Assessing the state of software in a large enterprise. *Empirical Software Engineering*, 15(3): 219–249, June 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.

springer.com/accesspage/article/10.1007/s10664-009-9120-1.

Falessi:2010:AES

[355] Davide Falessi, Muhammad Ali Babar, Giovanni Cantone, and Philippe Kruchten. Applying empirical software engineering to software architecture: challenges and lessons learned. *Empirical Software Engineering*, 15(3): 250–276, June 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9121-0.

Weyuker:2010:CES

[356] Elaine J. Weyuker, Thomas J. Ostrand, and Robert M. Bell. Comparing the effectiveness of several modeling methods for fault prediction. *Empirical Software Engineering*, 15(3): 277–295, June 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9111-2.

Gokhale:2010:MMS

[357] Swapna S. Gokhale and Robert E. Mullen. A multiplicative model of software defect repair times. *Empirical Software Engineering*, 15(3): 296–319, June 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9115-y.

Williams:2010:GES

[358] Laurie Williams. Guest editorial: Special issue on software reliability engineering. *Empirical Software Engineering*, 15(4):321–322, August 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-010-9129-5.pdf.

Zheng:2010:AQA

[359] Zibin Zheng and Michael R. Lyu. An adaptive QoS-aware fault tolerance strategy for web services. *Empirical Software Engineering*, 15(4): 323–345, August 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9126-8.

deAlmeida:2010:TPP

[360] Eduardo Cunha de Almeida, Gerson Sunyé, Yves Le Traon, and Patrick Valduriez. Testing peer-to-peer systems. *Empirical Software Engineering*, 15(4): 346–379, August 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9124-x.

Sarbu:2010:POB

[361] Constantin Sârbu, Andréas Johansson, Neeraj Suri, and Nachiappan Nagappan. Profiling the operational behavior of OS device drivers. *Empirical Software Engineering*, 15(4): 380–422, August 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-009-9122-z.

Klas:2010:SPC

[362] Michael Kläs, Haruka Nakao, Frank Elberzhager, and Jürgen Münch. Sup-

port planning and controlling of early quality assurance by combining expert judgment and defect data — a case study. *Empirical Software Engineering*, 15(4):423–454, August 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-009-9112-1`.

DeLucia:2010:ECU

[363] Andrea De Lucia, Carmine Gravino, Rocco Oliveto, and Genoveffa Tortora. An experimental comparison of ER and UML class diagrams for data modelling. *Empirical Software Engineering*, 15(5):455–492, October 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-009-9127-7`.

Porras:2010:ESE

[364] Gerardo Cepeda Porras and Yann-Gaël Guéhéneuc. An empirical study on the efficiency of different design pattern representations in UML class diagrams. *Empirical Software Engineering*, 15(5):493–522, October 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-009-9125-9`.

Mittas:2010:LLS

[365] Nikolaos Mittas and Lefteris Angelis. LSEbA: least squares regression and estimation by analogy in a semi-parametric model for software cost estimation. *Empirical Software Engineering*, 15(5):523–555, October 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-010-9128-6`.

Huynh:2010:EIO

[366] Toan Huynh and James Miller. An empirical investigation into open source web applications' implementation vulnerabilities. *Empirical Software Engineering*, 15(5):556–576, October 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-010-9131-y`.

Koru:2010:TTR

[367] Gunes Koru, Hongfang Liu, Dongsong Zhang, and Khaled El Emam. Testing the theory of relative defect proneness for closed-source software. *Empirical Software Engineering*, 15(6):577–598, December 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-010-9132-x`.

Michaelides:2010:MFE

[368] George Michaelides, Chris Thomson, and Stephen Wood. Measuring fidelity to Extreme programming: a psychometric approach. *Empirical Software Engineering*, 15(6):599–617, December 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-010-9130-z`.

Kitchenham:2010:RSL

[369] Barbara A. Kitchenham, Pearl Brereton, Mark Turner, Mahmood K. Ni-

azi, Stephen Linkman, Rialette Pretorius, and David Budgen. Refining the systematic literature review process — two participant-observer case studies. *Empirical Software Engineering*, 15(6): 618–653, December 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-010-9134-8`.

Petersen:2010:EMP

[370] Kai Petersen and Claes Wohlin. The effect of moving from a plan-driven to an incremental software development approach with Agile practices. *Empirical Software Engineering*, 15(6):654–693, December 2010. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-010-9136-6`.

DiPenta:2011:ISI

[371] Massimiliano Di Penta and Simon Poulding. Introduction to the special issue on search based software engineering. *Empirical Software Engineering*, 16(1):1–4, February 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-011-9154-z.pdf`.

Bate:2011:WAM

[372] Iain Bate and Usman Khan. WCET analysis of modern processors using multi-criteria optimisation. *Empirical Software Engineering*, 16(1):5–28, February 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-010-9133-9`.

Durillo:2011:SBO

[373] Juan J. Durillo, Yuanyuan Zhang, Enrique Alba, Mark Harman, and Antonio J. Nebro. A study of the bi-objective next release problem. *Empirical Software Engineering*, 16(1): 29–60, February 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-010-9147-3`.

Garvin:2011:EIM

[374] Brady J. Garvin, Myra B. Cohen, and Matthew B. Dwyer. Evaluating improvements to a meta-heuristic search for constrained interaction testing. *Empirical Software Engineering*, 16(1):61–102, February 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-010-9135-7`.

Marchetto:2011:USB

[375] Alessandro Marchetto and Paolo Tonella. Using search-based algorithms for Ajax event sequence generation during testing. *Empirical Software Engineering*, 16(1):103–140, February 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-010-9149-1`.

Kpodjedo:2011:DEM

[376] Segla Kpodjedo, Filippo Ricca, Philippe Galinier, Yann-Gaël Guéhéneuc, and Giuliano Antoniol. Design evolution metrics for defect prediction in object oriented systems. *Empirical Software Engineering*, 16(1):141–175, February

2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-010-9151-7.

Bannerman:2011:MCS

[377] Steve Bannerman and Andrew Martin. A multiple comparative study of test-with development product changes and their effects on team speed and product quality. *Empirical Software Engineering*, 16(2):177–210, April 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-010-9137-5.

Corazza:2011:IUS

[378] Anna Corazza, Sergio Di Martino, Filomena Ferrucci, Carmine Gravino, and Emilia Mendes. Investigating the use of support vector regression for web effort estimation. *Empirical Software Engineering*, 16(2):211–243, April 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-010-9138-4.

Budgen:2011:RCP

[379] David Budgen, Andy J. Burn, and Barbara Kitchenham. Reporting computing projects through structured abstracts: a quasi-experiment. *Empirical Software Engineering*, 16(2):244–277, April 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-010-9139-3.

Hofman:2011:BES

[380] Radosław Hofman. Behavioral economics in software quality engineering. *Empirical Software Engineering*, 16(2):278–293, April 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-010-9140-x.

Juristo:2011:RNE

[381] Natalia Juristo and Sira Vegas. The role of non-exact replications in software engineering experiments. *Empirical Software Engineering*, 16(3):295–324, June 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-010-9141-9.

Zaidman:2011:SCE

[382] Andy Zaidman, Bart Van Rompaey, Arie van Deursen, and Serge Demeyer. Studying the co-evolution of production and test code in open source and industrial developer test processes through repository mining. *Empirical Software Engineering*, 16(3):325–364, June 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-010-9143-7.pdf.

Ivarsson:2011:MER

[383] Martin Ivarsson and Tony Gorschek. A method for evaluating rigor and industrial relevance of technology evaluations. *Empirical Software Engineering*, 16(3):365–395, June 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.

springer.com/accesspage/article/10.1007/s10664-010-9146-4.

Posnett:2011:ESI

[384] Daryl Posnett, Christian Bird, and Prem Devanbu. An empirical study on the influence of pattern roles on change-proneness. *Empirical Software Engineering*, 16(3):396–423, June 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-010-9148-2.pdf.

Dybaa:2011:QRS

[385] Tore Dybå, Rafael Prikladnicki, Kari Rönkkö, Carolyn Seaman, and Jonathan Sillito. Qualitative research in software engineering. *Empirical Software Engineering*, 16(4):425–429, August 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-011-9163-y.pdf.

McLeod:2011:QRS

[386] Laurie McLeod, Stephen G. MacDonell, and Bill Doolin. Qualitative research on software development: a longitudinal case study methodology. *Empirical Software Engineering*, 16(4):430–459, August 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-010-9153-5.

Sim:2011:GWS

[387] Susan Elliott Sim and Thomas A. Alspaugh. Getting the whole story: an experience report on analyzing data elicited using the war stories procedure. *Empirical Software Engineering*, 16(4):460–486, August 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-011-9157-9.pdf.

Adolph:2011:UGT

[388] Steve Adolph, Wendy Hall, and Philippe Kruchten. Using grounded theory to study the experience of software development. *Empirical Software Engineering*, 16(4):487–513, August 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-010-9152-6.

Prechelt:2011:SRM

[389] Lutz Prechelt and Christopher Oezbek. The search for a research method for studying OSS process innovation. *Empirical Software Engineering*, 16(4):514–537, August 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9160-1.

Arias:2011:PDS

[390] Trosky B. Callo Arias, Pieter van der Spek, and Paris Avgeriou. A practice-driven systematic review of dependency analysis solutions. *Empirical Software Engineering*, 16(5):544–586, October 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-011-9158-8.pdf.

Martens:2011:MCB

[391] Anne Martens, Heiko Koziolek, Lutz Prechelt, and Ralf Reussner. From monolithic to component-based performance evaluation of software architectures. *Empirical Software Engineering*, 16(5):587–622, October 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-010-9142-8`.

Wermelinger:2011:AAE

[392] Michel Wermelinger, Yijun Yu, Angela Lozano, and Andrea Capiluppi. Assessing architectural evolution: a case study. *Empirical Software Engineering*, 16(5):623–666, October 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9164-x`.

Li:2011:CMC

[393] Zude Li, Nazim H. Madhavji, Syed Shariyar Murtaza, Mechelle Gittens, Andriy V. Miranskyy, David Godwin, and Enzo Cialini. Characteristics of multiple-component defects and architectural hotspots: a large system case study. *Empirical Software Engineering*, 16(5):667–702, October 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9155-y`.

Babar:2011:ERS

[394] Muhammad Ali Babar, Patricia Lago, and Arie Van Deursen. Empirical research in software architecture: opportunities, challenges, and approaches. *Empirical Software Engineering*, 16 (5):??, October 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-011-9168-6.pdf`.

Robillard:2011:FSA

[395] Martin P. Robillard and Robert DeLine. A field study of API learning obstacles. *Empirical Software Engineering*, 16(6):703–732, December 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-010-9150-8`.

Gonzales:2011:EUR

[396] Carol K. Gonzales and Gondy Leroy. Eliciting user requirements using Appreciative Inquiry. *Empirical Software Engineering*, 16(6):733–772, December 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9156-x`.

Revelle:2011:UST

[397] Meghan Revelle, Malcom Gethers, and Denys Poshyvanyk. Using structural and textual information to capture feature coupling in object-oriented software. *Empirical Software Engineering*, 16(6):773–811, December 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9159-7`.

Herbold:2011:COT

[398] Steffen Herbold, Jens Grabowski, and Stephan Waack. Calculation and optimization of thresholds for sets of software metrics. *Empirical Software Engineering*, 16(6):812–841, December 2011. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-011-9162-z.pdf`.

Menzies:2012:SIR

[399] Tim Menzies and Martin Shepperd. Special issue on repeatable results in software engineering prediction. *Empirical Software Engineering*, 17(1–2):1–17, February 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-011-9193-5.pdf`.

Murphy:2012:DBG

[400] Brendan Murphy. The difficulties of building generic reliability models for software. *Empirical Software Engineering*, 17(1–2):18–22, February 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9184-6`.

Myrtveit:2012:VRE

[401] Ingunn Myrtveit and Erik Stensrud. Validity and reliability of evaluation procedures in comparative studies of effort prediction models. *Empirical Software Engineering*, 17(1–2):23–33, February 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9183-7`.

Mittas:2012:PTB

[402] Nikolaos Mittas and Lefteris Angelis. A permutation test based on regression error characteristic curves for software cost estimation models. *Empirical Software Engineering*, 17(1–2):34–61, February 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9177-5`.

Turhan:2012:DSP

[403] Burak Turhan. On the dataset shift problem in software engineering prediction models. *Empirical Software Engineering*, 17(1–2):62–74, February 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9182-8`.

Gonzalez-Barahona:2012:RES

[404] Jesús M. González-Barahona and Gregorio Robles. On the reproducibility of empirical software engineering studies based on data retrieved from development repositories. *Empirical Software Engineering*, 17(1–2):75–89, February 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-011-9181-9.pdf`.

Azzeh:2012:RAC

[405] Mohammad Azzeh. A replicated assessment and comparison of adaptation techniques for analogy-based effort estimation. *Empirical Software*

Engineering, 17(1–2):90–127, February 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9176-6.

Tasiran:2012:LPT

[406] Serdar Tasiran, M. Erkan Keremoğlu, and Kivanç Muşlu. Location pairs: a test coverage metric for shared-memory concurrent programs. *Empirical Software Engineering*, 17(3): 129–165, June 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9166-8.

Maia:2012:QHC

[407] Renato Maia, Renato Cerqueira, Clarisse Sieckenius de Souza, and Tomás Guisasola-Gorham. A qualitative human-centric evaluation of flexibility in middleware implementations. *Empirical Software Engineering*, 17(3): 166–199, June 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9167-7.

Lu:2012:AOO

[408] Hongmin Lu, Yuming Zhou, Baowen Xu, Hareton Leung, and Lin Chen. The ability of object-oriented metrics to predict change-proneness: a meta-analysis. *Empirical Software Engineering*, 17(3):200–242, June 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9170-z.

Khomh:2012:ESI

[409] Foutse Khomh, Massimiliano Di Penta, Yann-Gaël Guéhéneuc, and Giuliano Antoniol. An exploratory study of the impact of antipatterns on class change- and fault-proneness. *Empirical Software Engineering*, 17(3): 243–275, June 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9171-y.

Kosar:2012:PCD

[410] Tomaž Kosar, Marjan Mernik, and Jeffrey C. Carver. Program comprehension of domain-specific and general-purpose languages: comparison using a family of experiments. *Empirical Software Engineering*, 17(3): 276–304, June 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9172-x.

Wnuk:2012:REL

[411] Krzysztof Wnuk, Martin Höst, and Björn Regnell. Replication of an experiment on linguistic tool support for consolidation of requirements from multiple sources. *Empirical Software Engineering*, 17(3):305–344, June 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9174-8.

Godfrey:2012:ISI

[412] Michael Godfrey and Jim Whitehead. Introduction to the special issue on software repository mining in 2009.

Empirical Software Engineering, 17(4–5):345–347, August 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9188-2`.

Ekanayake:2012:TVD

[413] Jayalath Ekanayake, Jonas Tappolet, Harald C. Gall, and Abraham Bernstein. Time variance and defect prediction in software projects. *Empirical Software Engineering*, 17(4–5): 348–389, August 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9180-x`.

Shin:2012:UCS

[414] Yonghee Shin, Robert M. Bell, Thomas J. Ostrand, and Elaine J. Weyuker. On the use of calling structure information to improve fault prediction. *Empirical Software Engineering*, 17(4–5):390–423, August 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9165-9`.

Bajracharya:2012:AMC

[415] Sushil Krishna Bajracharya and Cristina Videira Lopes. Analyzing and mining a code search engine usage log. *Empirical Software Engineering*, 17(4–5):424–466, August 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-010-9144-6.pdf`.

Hattori:2012:RCO

[416] Lile Palma Hattori, Michele Lanza, and Romain Robbes. Refining code ownership with synchronous changes. *Empirical Software Engineering*, 17(4–5): 467–499, August 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-010-9145-5`.

Whitehead:2012:ISI

[417] Jim Whitehead and Thomas Zimmermann. Introduction to the special issue on Mining Software Repositories in 2010. *Empirical Software Engineering*, 17(4–5):500–502, August 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9206-z`.

Rahman:2012:CWS

[418] Foyzur Rahman, Christian Bird, and Premkumar Devanbu. Clones: what is that smell? *Empirical Software Engineering*, 17(4–5):503–530, August 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9195-3`.

DAmbros:2012:EDP

[419] Marco D'Ambros, Michele Lanza, and Romain Robbes. Evaluating defect prediction approaches: a benchmark and an extensive comparison. *Empirical Software Engineering*, 17(4–5): 531–577, August 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.`

springer.com/accesspage/article/10.1007/s10664-011-9173-9.

McIntosh:2012:EJB

[420] Shane McIntosh, Bram Adams, and Ahmed E. Hassan. The evolution of Java build systems. *Empirical Software Engineering*, 17(4–5):578–608, August 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9169-5.

Hoda:2012:DGT

[421] Rashina Hoda, James Noble, and Stuart Marshall. Developing a grounded theory to explain the practices of self-organizing Agile teams. *Empirical Software Engineering*, 17(6):609–639, December 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9161-0.

Calefato:2012:CMC

[422] Fabio Calefato, Daniela Damian, and Filippo Lanubile. Computer-mediated communication to support distributed requirements elicitations and negotiations tasks. *Empirical Software Engineering*, 17(6):640–674, December 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9179-3.

Pikkarainen:2012:SBB

[423] Minna Pikkarainen, Outi Salo, Raija Kuusela, and Pekka Abrahamsson. Strengths and barriers behind the successful Agile deployment — insights from the three software intensive companies in Finland. *Empirical Software Engineering*, 17(6):675–702, December 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9185-5.

Monperrus:2012:WSD

[424] Martin Monperrus, Michael Eichberg, Elif Tekes, and Mira Mezini. What should developers be aware of? An empirical study on the directives of API documentation. *Empirical Software Engineering*, 17(6):703–737, December 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9186-4.

Lopez-Martin:2012:SDE

[425] Cuauhtemoc Lopez-Martin, Claudia Isaza, and Arturo Chavoya. Software development effort prediction of industrial projects applying a general regression neural network. *Empirical Software Engineering*, 17(6):738–756, December 2012. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9192-6.

Kocaguneli:2013:KMS

[426] Ekrem Kocaguneli, Tim Menzies, and Jacky W. Keung. Kernel methods for software effort estimation. *Empirical Software Engineering*, 18(1):1–24, February 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.

springer.com/accesspage/article/10.1007/s10664-011-9189-1.

Shin:2013:CTF

[427] Yonghee Shin and Laurie Williams. Can traditional fault prediction models be used for vulnerability prediction? *Empirical Software Engineering*, 18(1): 25–59, February 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9190-8.

Capiluppi:2013:EEF

[428] Andrea Capiluppi and Daniel Izquierdo-Cortázar. Effort estimation of FLOSS projects: a study of the Linux kernel. *Empirical Software Engineering*, 18(1): 60–88, February 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-011-9191-7.

Mohagheghi:2013:ESS

[429] Parastoo Mohagheghi, Wasif Gilani, Alin Stefanescu, and Miguel A. Fernandez. An empirical study of the state of the practice and acceptance of model-driven engineering in four industrial cases. *Empirical Software Engineering*, 18(1):89–116, February 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9196-x.

Raja:2013:ACC

[430] Uzma Raja. All complaints are not created equal: text analysis of open source software defect reports. *Empirical Software Engineering*, 18(1):117–138, February 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9197-9.

Holbrook:2013:SMT

[431] Elizabeth Ashlee Holbrook, Jane Huffman Hayes, Alex Dekhtyar, and Wenbin Li. A study of methods for textual satisfaction assessment. *Empirical Software Engineering*, 18(1):139–176, February 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9198-8.

Antoniol:2013:PSI

[432] Giuliano Antoniol and Keith B. Gallagher. Preface to the special issue on program comprehension. *Empirical Software Engineering*, 18(2):177–180, April 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-012-9212-1.pdf.

Zaidman:2013:UAA

[433] Andy Zaidman, Nick Matthijssen, Margaret-Anne Storey, and Arie van Deursen. Understanding Ajax applications by connecting client and server-side execution traces. *Empirical Software Engineering*, 18(2):181–218, April 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-012-9200-5.pdf.

Binkley:2013:IIS

[434] Dave Binkley, Marcia Davis, Dawn Lawrie, Jonathan I. Maletic, Christopher Morrell, and Bonita Sharif. The impact of identifier style on effort and comprehension. *Empirical Software Engineering*, 18(2):219–276, April 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9201-4`.

Dit:2013:IIR

[435] Bogdan Dit, Meghan Revelle, and Denys Poshyvanyk. Integrating information retrieval, execution and link analysis algorithms to improve feature location in software. *Empirical Software Engineering*, 18(2):277–309, April 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9194-4`.

Lammel:2013:UPP

[436] Ralf Lämmel and Ekaterina Pek. Understanding privacy policies. *Empirical Software Engineering*, 18(2): 310–374, April 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9204-1`.

Bettenburg:2013:SIS

[437] Nicolas Bettenburg and Ahmed E. Hassan. Studying the impact of social interactions on software quality. *Empirical Software Engineering*, 18(2): 375–431, April 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9205-0`.

Menzies:2013:PMS

[438] Tim Menzies and Gunes Koru. Predictive models in software engineering. *Empirical Software Engineering*, 18(3):433–434, June 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-013-9252-1.pdf`.

Schulz:2013:PFD

[439] Thomas Schulz, Łukasz Radliński, Thomas Gorges, and Wolfgang Rosenstiel. Predicting the flow of defect correction effort using a Bayesian network model. *Empirical Software Engineering*, 18(3):435–477, June 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9175-7`.

Bell:2013:LII

[440] Robert M. Bell, Thomas J. Ostrand, and Elaine J. Weyuker. The limited impact of individual developer data on software defect prediction. *Empirical Software Engineering*, 18(3): 478–505, June 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9178-4`.

Corazza:2013:UTS

[441] A. Corazza, S. Di Martino, F. Ferrucci, C. Gravino, F. Sarro, and E. Mendes. Using tabu search to configure sup-

port vector regression for effort estimation. *Empirical Software Engineering*, 18(3):506–546, June 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-011-9187-3`.

OCinneide:2013:ISI

[442] Mel Ó Cinnéide and Myra B. Cohen. Introduction to the special issue on search based software engineering. *Empirical Software Engineering*, 18(3):547–549, June 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-013-9257-9.pdf`.

Yoo:2013:GTS

[443] Shin Yoo, Mark Harman, and Shmuel Ur. GPGPU test suite minimisation: search based software engineering performance improvement using graphics cards. *Empirical Software Engineering*, 18(3):550–593, June 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9247-y`.

Arcuri:2013:PTD

[444] Andrea Arcuri and Gordon Fraser. Parameter tuning or default values? An empirical investigation in search-based software engineering. *Empirical Software Engineering*, 18(3):594–623, June 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9249-9`.

Walia:2013:UEA

[445] Gursimran S. Walia and Jeffrey C. Carver. Using error abstraction and classification to improve requirement quality: conclusions from a family of four empirical studies. *Empirical Software Engineering*, 18(4):625–658, August 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9202-3`.

Seo:2013:VOE

[446] Yeong-Seok Seo and Doo-Hwan Bae. On the value of outlier elimination on software effort estimation research. *Empirical Software Engineering*, 18(4):659–698, August 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9207-y`.

Feigenspan:2013:DBC

[447] Janet Feigenspan, Christian Kästner, Sven Apel, Jörg Liebig, Michael Schulze, Raimund Dachselt, Maria Papendieck, Thomas Leich, and Gunter Saake. Do background colors improve program comprehension in the `#ifdef` hell? *Empirical Software Engineering*, 18(4):699–745, August 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9208-x`.

Koziolek:2013:PRP

[448] Heiko Koziolek, Bastian Schlich, Steffen Becker, and Michael Hauck. Performance and reliability prediction for

evolving service-oriented software systems. *Empirical Software Engineering*, 18(4):746–790, August 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9213-0`.

Walkinshaw:2013:SCE

[449] Neil Walkinshaw, Bernard Lambeau, Christophe Damas, Kirill Bogdanov, and Pierre Dupont. STAMINA: a competition to encourage the development and assessment of software model inference techniques. *Empirical Software Engineering*, 18(4):791–824, August 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-012-9210-3.pdf`.

Heule:2013:SMS

[450] Marijn J. H. Heule and Sicco Verwer. Software model synthesis using satisfiability solvers. *Empirical Software Engineering*, 18(4):825–856, August 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9222-z`.

Pinzger:2013:GER

[451] Martin Pinzger and Giuliano Antoniol. Guest editorial: reverse engineering. *Empirical Software Engineering*, 18(5):857–858, October 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-012-9237-5.pdf`.

Greiler:2013:WYP

[452] Michaela Greiler and Arie van Deursen. What your plug-in test suites really test: an integration perspective on test suite understanding. *Empirical Software Engineering*, 18(5):859–900, October 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9235-7`.

Bavota:2013:USS

[453] Gabriele Bavota, Andrea De Lucia, Andrian Marcus, and Rocco Oliveto. Using structural and semantic measures to improve software modularization. *Empirical Software Engineering*, 18(5):901–932, October 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9226-8`.

Kagdi:2013:ICL

[454] Huzefa Kagdi, Malcom Gethers, and Denys Poshyvanyk. Integrating conceptual and logical couplings for change impact analysis in software. *Empirical Software Engineering*, 18(5):933–969, October 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9233-9`.

Beck:2013:ISE

[455] Fabian Beck and Stephan Diehl. On the impact of software evolution on software clustering. *Empirical Software Engineering*, 18(5):970–1004, October 2013. CODEN ESENFW. ISSN

1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9225-9.

Shihab:2013:SRO

[456] Emad Shihab, Akinori Ihara, Yasutaka Kamei, Walid M. Ibrahim, Masao Ohira, Bram Adams, Ahmed E. Hassan, and Ken ichi Matsumoto. Studying re-opened bugs in open source software. *Empirical Software Engineering*, 18(5):1005–1042, October 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9228-6.

Xie:2013:ISI

[457] Tao Xie, Thomas Zimmermann, and Arie van Deursen. Introduction to the special issue on mining software repositories. *Empirical Software Engineering*, 18(6):1043–1046, December 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-013-9273-9.pdf.

Parnin:2013:AUJ

[458] Chris Parnin, Christian Bird, and Emerson Murphy-Hill. Adoption and use of Java generics. *Empirical Software Engineering*, 18(6):1047–1089, December 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9236-6.

Pagano:2013:HDO

[459] Dennis Pagano and Walid Maalej. How do open source communities blog? *Empirical Software Engineering*, 18(6):1090–1124, December 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9211-2.

Hindle:2013:ATN

[460] Abram Hindle, Neil A. Ernst, Michael W. Godfrey, and John Mylopoulos. Automated topic naming. *Empirical Software Engineering*, 18(6):1125–1155, December 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9209-9.

Callau:2013:HWD

[461] Oscar Callaú, Romain Robbes, Éric Tanter, and David Röthlisberger. How (and why) developers use the dynamic features of programming languages: the case of smalltalk. *Empirical Software Engineering*, 18(6):1156–1194, December 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9203-2.

Davies:2013:SB

[462] Julius Davies, Daniel M. German, Michael W. Godfrey, and Abram Hindle. Software Bertillonage. *Empirical Software Engineering*, 18(6):1195–1237, December 2013. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.

springer.com/accesspage/article/10.1007/s10664-012-9199-7.

Canfora:2014:HCA

[463] Gerardo Canfora, Luigi Cerulo, Marta Cimitile, and Massimiliano Di Penta. How changes affect software entropy: an empirical study. *Empirical Software Engineering*, 19(1):1–38, February 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9214-z.

Pontes:2014:CMC

[464] Rodrigo Pastl Pontes, Paulo Claudino Véras, Ana Maria Ambrosio, and Emília Villani. Contributions of model checking and CoFI methodology to the development of space embedded software. *Empirical Software Engineering*, 19(1):39–68, February 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9215-y.

Offutt:2014:CSB

[465] Jeff Offutt, Vasileios Papadimitriou, and Upsorn Praphamontripong. A case study on bypass testing of web applications. *Empirical Software Engineering*, 19(1):69–104, February 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9216-x.

Smite:2014:EBT

[466] Darja Šmite, Claes Wohlin, Zane Galviņa, and Rafael Prikladnicki. An empirically based terminology and taxonomy for global software engineering. *Empirical Software Engineering*, 19(1):105–153, February 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9217-9.

Okutan:2014:SDP

[467] Ahmet Okutan and Olcay Taner Yıldız. Software defect prediction using Bayesian networks. *Empirical Software Engineering*, 19(1):154–181, February 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9218-8.

Thomas:2014:STC

[468] Stephen W. Thomas, Hadi Hemmati, Ahmed E. Hassan, and Dorothea Blostein. Static test case prioritization using topic models. *Empirical Software Engineering*, 19(1):182–212, February 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9219-7.

Lee:2014:MSE

[469] Taeho Lee, Taewan Gu, and Jongmoon Baik. MND-SCEMP: an empirical study of a software cost estimation modeling process in the defense domain. *Empirical Software Engineering*, 19(1):213–240, February 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9220-1.

Albayrak:2014:IIF

[470] Özlem Albayrak and Jeffrey C. Carver. Investigation of individual factors impacting the effectiveness of requirements inspections: a replicated experiment. *Empirical Software Engineering*, 19(1):241–266, February 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9221-0`.

Carver:2014:RSE

[471] Jeffrey C. Carver, Natalia Juristo, Maria Teresa Baldassarre, and Sira Vegas. Replications of software engineering experiments. *Empirical Software Engineering*, 19(2):267–276, April 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-013-9290-8.pdf`.

Fucci:2014:RTT

[472] Davide Fucci and Burak Turhan. On the role of tests in test-driven development: a differentiated and partial replication. *Empirical Software Engineering*, 19(2):277–302, April 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9259-7`.

Itkonen:2014:TCN

[473] Juha Itkonen and Mika V. Mäntylä. Are test cases needed? Replicated comparison between exploratory and test-case-based software testing. *Empirical Software Engineering*, 19(2):303–342, April 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9266-8`.

Gomez:2014:RQE

[474] Marta N. Gómez and Silvia T. Acuña. A replicated quasi-experimental study on the influence of personality and team climate in software development. *Empirical Software Engineering*, 19(2):343–377, April 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9265-9`.

Apa:2014:EDF

[475] Cecilia Apa, Oscar Dieste, Edison G. Espinosa G., and Efraín R. Fonseca C. Effectiveness for detecting faults within and outside the scope of testing techniques: an independent replication. *Empirical Software Engineering*, 19(2):378–417, April 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9267-7`.

Williams:2014:ESA

[476] Byron J. Williams and Jeffrey C. Carver. Examination of the software architecture change characterization scheme using three empirical studies. *Empirical Software Engineering*, 19(3):419–464, June 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9223-y`.

Biggers:2014:CLD

[477] Lauren R. Biggers, Cecylia Bocovich, Riley Capshaw, Brian P. Eddy, Letha H. Etzkorn, and Nicholas A. Kraft. Configuring latent Dirichlet allocation based feature location. *Empirical Software Engineering*, 19(3): 465–500, June 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9224-x`.

daSilva:2014:RES

[478] Fabio Q. B. da Silva, Marcos Suassuna, A. César C. França, Alicia M. Grubb, Tatiana B. Gouveia, Cleviton V. F. Monteiro, and Igor Ebrahim dos Santos. Replication of empirical studies in software engineering research: a systematic mapping study. *Empirical Software Engineering*, 19(3): 501–557, June 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9227-7`.

Offutt:2014:ISA

[479] Jeff Offutt and Chandra Alluri. An industrial study of applying input space partitioning to test financial calculation engines. *Empirical Software Engineering*, 19(3):558–581, June 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9229-5`.

Linares-Vasquez:2014:UML

[480] Mario Linares-Vásquez, Collin McMillan, Denys Poshyvanyk, and Mark Grechanik. On using machine learning to automatically classify software applications into domain categories. *Empirical Software Engineering*, 19(3): 582–618, June 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9230-z`.

Barua:2014:WDT

[481] Anton Barua, Stephen W. Thomas, and Ahmed E. Hassan. What are developers talking about? An analysis of topics and trends in Stack Overflow. *Empirical Software Engineering*, 19(3):619–654, June 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9231-y`.

Ljungkrantz:2014:ESC

[482] Oscar Ljungkrantz, Knut Åkesson, Martin Fabian, and Amir Hossein Ebrahimi. An empirical study of control logic specifications for programmable logic controllers. *Empirical Software Engineering*, 19(3): 655–677, June 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-012-9232-x`.

Reinhartz-Berger:2014:CUB

[483] Iris Reinhartz-Berger and Arnon Sturm. Comprehensibility of UML-based software product line specifications. *Empirical Software Engineering*, 19(3):678–713, June 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.`

springer.com/accesspage/article/10.1007/s10664-012-9234-8.

Salleh:2014:IEP

[484] Norsaremah Salleh, Emilia Mendes, and John Grundy. Investigating the effects of personality traits on pair programming in a higher education setting through a family of experiments. *Empirical Software Engineering*, 19(3): 714–752, June 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9238-4.

Latorre:2014:SAT

[485] Roberto Latorre. A successful application of a test-driven development strategy in the industrial environment. *Empirical Software Engineering*, 19(3): 753–773, June 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9281-9.

AlDallal:2014:POO

[486] Jehad Al Dallal and Sandro Morasca. Predicting object-oriented class reuse-proneness using internal quality attributes. *Empirical Software Engineering*, 19(4):775–821, August 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9239-3.

Prikladnicki:2014:DCG

[487] Rafael Prikladnicki, Alexander Boden, Gabriela Avram, Cleidson R. B. de Souza, and Volker Wulf. Data collection in global software engineering research: learning from past experience. *Empirical Software Engineering*, 19(4): 822–856, August 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-012-9240-x.

Bardsiri:2014:FME

[488] Vahid Khatibi Bardsiri, Dayang Norhayati Abang Jawawi, Siti Zaiton Mohd Hashim, and Elham Khatibi. A flexible method to estimate the software development effort based on the classification of projects and localization of comparisons. *Empirical Software Engineering*, 19(4):857–884, August 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9241-4.

Gousios:2014:CQS

[489] Georgios Gousios and Diomidis Spinellis. Conducting quantitative software engineering studies with Alitheia Core. *Empirical Software Engineering*, 19(4): 885–925, August 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9242-3.

Nugroho:2014:IUM

[490] Ariadi Nugroho and Michel R. V. Chaudron. The impact of UML modeling on defect density and defect resolution time in a proprietary system. *Empirical Software Engineering*, 19(4): 926–954, August 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.

springer.com/accesspage/article/10.1007/s10664-013-9243-2.

Vasilescu:2014:VSW

[491] Bogdan Vasilescu, Alexander Serebrenik, Mathieu Goeminne, and Tom Mens. On the variation and specialisation of workload — a case study of the Gnome ecosystem community. *Empirical Software Engineering*, 19(4): 955–1008, August 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9244-1.

Eyolfson:2014:CBB

[492] Jon Eyolfson, Lin Tan, and Patrick Lam. Correlations between bugginess and time-based commit characteristics. *Empirical Software Engineering*, 19(4): 1009–1039, August 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9245-0.

Ceccato:2014:FEA

[493] Mariano Ceccato, Massimiliano Di Penta, Paolo Falcarin, Filippo Ricca, Marco Torchiano, and Paolo Tonella. A family of experiments to assess the effectiveness and efficiency of source code obfuscation techniques. *Empirical Software Engineering*, 19(4):1040–1074, August 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9248-x.

Lavazza:2014:ESC

[494] Luigi Lavazza. An evaluation of the statistical convertibility of function points into COSMIC function points. *Empirical Software Engineering*, 19(4): 1075–1110, August 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9246-z.

Yamashita:2014:ACC

[495] Aiko Yamashita. Assessing the capability of code smells to explain maintenance problems: an empirical study combining quantitative and qualitative data. *Empirical Software Engineering*, 19(4):1111–1143, August 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9250-3.

Ihme:2014:CIP

[496] Tuomas Ihme, Minna Pikkarainen, Susanna Teppola, Jukka Kääriäinen, and Olivier Biot. Challenges and industry practices for managing software variability in small and medium sized enterprises. *Empirical Software Engineering*, 19(4):1144–1168, August 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9253-0.

Osaiweran:2014:EIF

[497] Ammar Osaiweran, Mathijs Schuts, and Jozef Hooman. Experiences with incorporating formal techniques into industrial practice. *Empirical Software Engineering*, 19(4):1169–1194, August 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.

com/accesspage/article/10.1007/s10664-013-9251-2.

Lanubile:2014:RCT

[498] Filippo Lanubile, Rafael Prikladnicki, Erran Carmel, and Rini van Solingen. Resolving the challenges of time and distance. *Empirical Software Engineering*, 19(5):1195–1196, October 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-014-9309-9.pdf.

Estler:2014:AVS

[499] Hans-Christian Estler, Martin Nordio, Carlo A. Furia, Bertrand Meyer, and Johannes Schneider. Agile vs. structured distributed software development: A case study. *Empirical Software Engineering*, 19(5):1197–1224, October 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9271-y.

Moe:2014:OOI

[500] Nils Brede Moe, Darja Šmite, Geir Kjetil Hanssen, and Hamish Barney. From offshore outsourcing to insourcing and partnerships: four failed outsourcing attempts. *Empirical Software Engineering*, 19(5):1225–1258, October 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9272-x.

Godfrey:2014:SIP

[501] Michael W. Godfrey and Arie van Deursen. Special issue on program comprehension. *Empirical Software Engineering*, 19(5):1259–1260, October 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-014-9329-5.pdf.

Jbara:2014:HMF

[502] Ahmad Jbara, Adam Matan, and Dror G. Feitelson. High-MCC functions in the Linux kernel. *Empirical Software Engineering*, 19(5):1261–1298, October 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9275-7.

Siegmund:2014:MMP

[503] Janet Siegmund, Christian Kästner, Jörg Liebig, Sven Apel, and Stefan Hanenberg. Measuring and modeling programming experience. *Empirical Software Engineering*, 19(5):1299–1334, October 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9286-4.

Hanenberg:2014:ESI

[504] Stefan Hanenberg, Sebastian Kleinschmager, Romain Robbes, Éric Tanter, and Andreas Stefik. An empirical study on the impact of static typing on software maintainability. *Empirical Software Engineering*, 19(5):1335–1382, October 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9289-1.

DeLucia:2014:LSC

[505] Andrea De Lucia, Massimiliano Di Penta, Rocco Oliveto, Annibale Panichella, and Sebastiano Panichella. Labeling source code with information retrieval methods: an empirical study. *Empirical Software Engineering*, 19(5): 1383–1420, October 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9285-5`.

Fraser:2014:GES

[506] Gordon Fraser and Jerffeson Teixeira de Souza. Guest editorial: Search-based software engineering. *Empirical Software Engineering*, 19(5):1421–1422, October 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-014-9310-3.pdf`.

deOBarros:2014:EEI

[507] Márcio de O.Barros. An experimental evaluation of the importance of randomness in hill climbing searches applied to software engineering problems. *Empirical Software Engineering*, 19(5): 1423–1465, October 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9294-4`.

Fredericks:2014:AAR

[508] Erik M. Fredericks, Byron DeVries, and Betty H. C. Cheng. AutoRELAX: automatically RELAXing a goal model to address uncertainty. *Empirical Software Engineering*, 19(5):1466–1501, October 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9305-0`.

Aitken:2014:ERN

[509] Jonathan M. Aitken, Rob Alexander, Tim Kelly, and Simon Poulding. Evolving robust networks for systems-of-systems: is it viable for large networks? *Empirical Software Engineering*, 19(5): 1502–1530, October 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9295-3`.

Chen:2014:SPE

[510] Ning Chen, Steven C. H. Hoi, and Xiaokui Xiao. Software process evaluation: a machine learning framework with application to defect management process. *Empirical Software Engineering*, 19(6):1531–1564, December 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9254-z`.

Borg:2014:RDS

[511] Markus Borg, Per Runeson, and Anders Ardö. Recovering from a decade: a systematic mapping of information retrieval approaches to software traceability. *Empirical Software Engineering*, 19(6):1565–1616, December 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9255-y`.

Bavota:2014:AEC

[512] Gabriele Bavota, Andrea De Lucia, Andrian Marcus, and Rocco Oliveto. Automating extract class refactoring: an improved method and its evaluation. *Empirical Software Engineering*, 19(6): 1617–1664, December 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9256-x`.

Tan:2014:BCO

[513] Lin Tan, Chen Liu, Zhenmin Li, Xuanhui Wang, Yuanyuan Zhou, and Chengxiang Zhai. Bug characteristics in open source software. *Empirical Software Engineering*, 19(6):1665–1705, December 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9258-8`.

Guerrouj:2014:EIE

[514] Latifa Guerrouj, Massimiliano Di Penta, Yann-Gaël Guéhéneuc, and Giuliano Antoniol. An experimental investigation on the effects of context on source code identifiers splitting and expansion. *Empirical Software Engineering*, 19(6):1706–1753, December 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9260-1`.

Hill:2014:ESI

[515] Emily Hill, David Binkley, Dawn Lawrie, Lori Pollock, and K. Vijay-Shanker. An empirical study of identifier splitting techniques. *Empirical Software Engineering*, 19(6):1754–1780, December 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9261-0`.

Runeson:2014:VFD

[516] Per Runeson, Andreas Stefik, and Anneliese Andrews. Variation factors in the design and analysis of replicated controlled experiments. *Empirical Software Engineering*, 19(6):1781–1808, December 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9262-z`.

Bjarnason:2014:CPA

[517] Elizabeth Bjarnason, Per Runeson, Markus Borg, Michael Unterkalmsteiner, Emelie Engström, Björn Regnell, Giedre Sabaliauskaite, Annabella Loconsole, Tony Gorschek, and Robert Feldt. Challenges and practices in aligning requirements with verification and validation: a case study of six companies. *Empirical Software Engineering*, 19(6):1809–1855, December 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9263-y`.

Yang:2014:SIS

[518] Jinqiu Yang and Lin Tan. SWordNet: Inferring semantically related words from software context. *Empirical Software Engineering*, 19(6):1856–1886, December 2014. CODEN ES-

ENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9264-x.

Martinez:2014:ESM

[519] Yulkeidi Martínez, Cristina Cachero, and Santiago Meliá. Empirical study on the maintainability of Web applications: Model-driven engineering vs code-centric. *Empirical Software Engineering*, 19(6):1887–1920, December 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9269-5.

Jedlitschka:2014:RES

[520] Andreas Jedlitschka, Natalia Juristo, and Dieter Rombach. Reporting experiments to satisfy professionals' information needs. *Empirical Software Engineering*, 19(6):1921–1955, December 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9268-6.

Han:2014:VDR

[521] Wen-Ming Han. Validating differential relationships between risk categories and project performance as perceived by managers. *Empirical Software Engineering*, 19(6):1956–1966, December 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9270-z.

Gomez-Martinez:2014:PAA

[522] Elena Gómez-Martínez, Rafael Gonzalez-Cabero, and Jose Merseguer. Performance assessment of an architecture with adaptative interfaces for people with special needs. *Empirical Software Engineering*, 19(6):1967–2018, December 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9297-1.

Al-Baik:2014:WIE

[523] Osama Al-Baik and James Miller. Waste identification and elimination in information technology organizations. *Empirical Software Engineering*, 19(6):2019–2061, December 2014. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-014-9302-3.

Shang:2015:SRB

[524] Weiyi Shang, Meiyappan Nagappan, and Ahmed E. Hassan. Studying the relationship between logging characteristics and the code quality of platform software. *Empirical Software Engineering*, 20(1):1–27, February 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9274-8.

Abelein:2015:UIU

[525] Ulrike Abelein and Barbara Paech. Understanding the influence of user participation and involvement on system success — a systematic mapping study.

Empirical Software Engineering, 20(1): 28–81, February 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9278-4`.

Jurkiewicz:2015:HBI

[526] Jakub Jurkiewicz, Jerzy Nawrocki, Mirosław Ochodek, and Tomasz Głowacki. HAZOP-based identification of events in use cases. *Empirical Software Engineering*, 20(1):82–109, February 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-013-9277-5.pdf`.

Ko:2015:PGC

[527] Andrew J. Ko, Thomas D. LaToza, and Margaret M. Burnett. A practical guide to controlled experiments of software engineering tools with human participants. *Empirical Software Engineering*, 20(1):110–141, February 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9279-3`.

Polancic:2015:EIC

[528] Gregor Polančič, Gregor Jošt, and Marjan Heričko. An experimental investigation comparing individual and collaborative work productivity when using desktop and cloud modeling tools. *Empirical Software Engineering*, 20(1): 142–175, February 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9280-x`.

Martinez:2015:MSR

[529] Matias Martinez and Martin Monperrus. Mining software repair models for reasoning on the search space of automated program fixing. *Empirical Software Engineering*, 20(1):176–205, February 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9282-8`.

Misbhauddin:2015:UMR

[530] Mohammed Misbhauddin and Mohammad Alshayeb. UML model refactoring: a systematic literature review. *Empirical Software Engineering*, 20(1): 206–251, February 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9283-7`.

Bettenburg:2015:MCC

[531] Nicolas Bettenburg, Ahmed E. Hassan, Bram Adams, and Daniel M. German. Management of community contributions. *Empirical Software Engineering*, 20(1):252–289, February 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9284-6`.

DiPenta:2015:GESa

[532] Massimiliano Di Penta and Tao Xie. Guest editorial: special section on mining software repositories. *Empirical Software Engineering*, 20(2): 291–293, April 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.`

springer.com/accesspage/article/10.1007/s10664-015-9383-7.

Bettenburg:2015:TIS

[533] Nicolas Bettenburg, Meiyappan Nagappan, and Ahmed E. Hassan. Towards improving statistical modeling of software engineering data: think locally, act globally! *Empirical Software Engineering*, 20(2):294–335, April 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9292-6.

Khomh:2015:UIR

[534] Foutse Khomh, Bram Adams, Tejinder Dhaliwal, and Ying Zou. Understanding the impact of rapid releases on software quality. *Empirical Software Engineering*, 20(2):336–373, April 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-014-9308-x.

Hindle:2015:GMM

[535] Abram Hindle. Green mining: a methodology of relating software change and configuration to power consumption. *Empirical Software Engineering*, 20(2):374–409, April 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9276-6.

DiPenta:2015:GESb

[536] Massimiliano Di Penta and Jonathan I. Maletic. Guest editorial: special section on software maintenance and evolution. *Empirical Software Engineering*, 20(2):410–412, April 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-015-9382-8.pdf.

Mader:2015:DDB

[537] Patrick Mäder and Alexander Egyed. Do developers benefit from requirements traceability when evolving and maintaining a software system? *Empirical Software Engineering*, 20(2):413–441, April 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-014-9314-z.

Ali:2015:ESI

[538] Nasir Ali, Zohreh Sharafi, Yann-Gaël Guéhéneuc, and Giuliano Antoniol. An empirical study on the importance of source code entities for requirements traceability. *Empirical Software Engineering*, 20(2):442–478, April 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-014-9315-y.

Hindle:2015:DTM

[539] Abram Hindle, Christian Bird, Thomas Zimmermann, and Nachiappan Nagappan. Do topics make sense to managers and developers? *Empirical Software Engineering*, 20(2):479–515, April 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.

springer.com/accesspage/article/10.1007/s10664-014-9312-1.

Lotufo:2015:MHB

[540] Rafael Lotufo, Zeeshan Malik, and Krzysztof Czarnecki. Modelling the 'hurried' bug report reading process to summarize bug reports. *Empirical Software Engineering*, 20(2):516–548, April 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-014-9311-2.

Hermans:2015:DRC

[541] Felienne Hermans, Martin Pinzger, and Arie van Deursen. Detecting and refactoring code smells in spreadsheet formulas. *Empirical Software Engineering*, 20(2):549–575, April 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9296-2.

delSagrado:2015:MOA

[542] José del Sagrado, Isabel M. del Águila, and Francisco J. Orellana. Multi-objective ant colony optimization for requirements selection. *Empirical Software Engineering*, 20(3):577–610, June 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9287-3.

Fraser:2015:FPA

[543] Gordon Fraser and Andrea Arcuri. 1600 faults in 100 projects: automatically finding faults while achieving high coverage with EvoSuite. *Empirical Software Engineering*, 20(3):611–639, June 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9288-2.

Jabangwe:2015:EEL

[544] Ronald Jabangwe, Jürgen Börstler, Darja Šmite, and Claes Wohlin. Empirical evidence on the link between object-oriented measures and external quality attributes: a systematic literature review. *Empirical Software Engineering*, 20(3):640–693, June 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9291-7.

Alegroth:2015:VGT

[545] Emil Alégroth, Robert Feldt, and Lisa Ryrholm. Visual GUI testing in practice: challenges, problems and limitations. *Empirical Software Engineering*, 20(3):694–744, June 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9293-5.

Robbes:2015:OOS

[546] Romain Robbes, David Röthlisberger, and Éric Tanter. Object-oriented software extensions in practice. *Empirical Software Engineering*, 20(3):745–782, June 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-013-9298-0.

Fraser:2015:ASM

[547] Gordon Fraser and Andrea Arcuri. Achieving scalable mutation-based generation of whole test suites. *Empirical Software Engineering*, 20(3): 783–812, June 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-013-9299-z`.

Kocaguneli:2015:TLE

[548] Ekrem Kocaguneli, Tim Menzies, and Emilia Mendes. Transfer learning in effort estimation. *Empirical Software Engineering*, 20(3):813–843, June 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9300-5`.

Afzal:2015:EEE

[549] Wasif Afzal, Ahmad Nauman Ghazi, Juha Itkonen, Richard Torkar, Anneliese Andrews, and Khurram Bhatti. An experiment on the effectiveness and efficiency of exploratory testing. *Empirical Software Engineering*, 20(3): 844–878, June 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9301-4`.

Russo:2015:MSL

[550] Barbara Russo, Giancarlo Succi, and Witold Pedrycz. Mining system logs to learn error predictors: a case study of a telemetry system. *Empirical Software Engineering*, 20(4):879–927, August 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9303-2`.

DiGiuseppe:2015:FDF

[551] Nicholas DiGiuseppe and James A. Jones. Fault density, fault types, and spectra-based fault localization. *Empirical Software Engineering*, 20(4): 928–967, August 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9304-1`.

Petersen:2015:EIO

[552] Kai Petersen, Cigdem Gencel, Negin Asghari, and Stefanie Betz. An elicitation instrument for operationalising GQM$^+$ Strategies (GQM$^+$S-EI). *Empirical Software Engineering*, 20(4): 968–1005, August 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9306-z`.

Santos:2015:FEI

[553] Viviane Santos, Alfredo Goldman, and Cleidson R. B. de Souza. Fostering effective inter-team knowledge sharing in Agile software development. *Empirical Software Engineering*, 20(4): 1006–1051, August 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9307-y`.

Bavota:2015:TSR

[554] Gabriele Bavota, Abdallah Qusef, Rocco Oliveto, Andrea De Lucia, and

Dave Binkley. Are test smells really harmful? An empirical study. *Empirical Software Engineering*, 20(4): 1052–1094, August 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9313-0`.

Yang:2015:CMC

[555] Jiachen Yang, Keisuke Hotta, Yoshiki Higo, Hiroshi Igaki, and Shinji Kusumoto. Classification model for code clones based on machine learning. *Empirical Software Engineering*, 20(4): 1095–1125, August 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-014-9316-x.pdf`.

Wu:2015:IIC

[556] Wei Wu, Adrien Serveaux, Yann-Gaël Guéhéneuc, and Giuliano Antoniol. The impact of imperfect change rules on framework API evolution identification: an empirical study. *Empirical Software Engineering*, 20(4):1126–1158, August 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9317-9`.

Siegmund:2015:CPP

[557] Janet Siegmund and Jana Schumann. Confounding parameters on program comprehension: a literature survey. *Empirical Software Engineering*, 20(4): 1159–1192, August 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9318-8`.

Gueheneuc:2015:ISI

[558] Yann-Gaël Guéhéneuc and Tom Mens. Introduction to the special issue on software maintenance and evolution research. *Empirical Software Engineering*, 20(5):1193–1197, October 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-015-9398-0.pdf`.

Dit:2015:SAR

[559] Bogdan Dit, Evan Moritz, Mario Linares-Vásquez, Denys Poshyvanyk, and Jane Cleland-Huang. Supporting and accelerating reproducible empirical research in software evolution and maintenance using TraceLab Component Library. *Empirical Software Engineering*, 20(5):1198–1236, October 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9339-3`.

Le:2015:SFF

[560] Tien-Duy B. Le, David Lo, and Ferdian Thung. Should I follow this fault localization tool's output? *Empirical Software Engineering*, 20(5):1237–1274, October 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9349-1`.

Bavota:2015:HAC

[561] Gabriele Bavota, Gerardo Canfora, Massimiliano Di Penta, Rocco Oliveto, and Sebastiano Panichella. How the

Apache community upgrades dependencies: an evolutionary study. *Empirical Software Engineering*, 20(5):1275–1317, October 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9325-9`.

Gharehyazie:2015:DIS

[562] Mohammad Gharehyazie, Daryl Posnett, Bogdan Vasilescu, and Vladimir Filkov. Developer initiation and social interactions in OSS: A case study of the Apache Software Foundation. *Empirical Software Engineering*, 20(5):1318–1353, October 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9332-x`.

Tian:2015:APB

[563] Yuan Tian, David Lo, Xin Xia, and Chengnian Sun. Automated prediction of bug report priority using multi-factor analysis. *Empirical Software Engineering*, 20(5):1354–1383, October 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9331-y`.

Mantyla:2015:RRS

[564] Mika V. Mäntylä, Bram Adams, Foutse Khomh, Emelie Engström, and Kai Petersen. On rapid releases and software testing: a case study and a semi-systematic literature review. *Empirical Software Engineering*, 20(5):1384–1425, October 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9338-4`.

Wohlin:2015:TDM

[565] Claes Wohlin and Aybüke Aurum. Towards a decision-making structure for selecting a research design in empirical software engineering. *Empirical Software Engineering*, 20(6):1427–1455, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9319-7`.

Moreno-Lizaranzu:2015:FAR

[566] Manuel J. Moreno-Lizaranzu and Federico Cuesta. A framework and architecture for rapid software development: a success story. *Empirical Software Engineering*, 20(6):1456–1485, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9320-1`.

Ceccato:2015:LSE

[567] Mariano Ceccato, Andrea Capiluppi, Paolo Falcarin, and Cornelia Boldyreff. A large study on the effect of code obfuscation on the quality of Java code. *Empirical Software Engineering*, 20(6):1486–1524, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9321-0`.

Bass:2015:HPO

[568] Julian M. Bass. How product owner teams scale Agile methods to large dis-

tributed enterprises. *Empirical Software Engineering*, 20(6):1525–1557, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9322-z`.

Robillard:2015:RRA

[569] Martin P. Robillard and Yam B. Chhetri. Recommending reference API documentation. *Empirical Software Engineering*, 20(6):1558–1586, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9323-y`.

McIntosh:2015:LSE

[570] Shane McIntosh, Meiyappan Nagappan, Bram Adams, Audris Mockus, and Ahmed E. Hassan. A large-scale empirical study of the relationship between build technology and build maintenance. *Empirical Software Engineering*, 20(6):1587–1633, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9324-x`.

Cruzes:2015:CSS

[571] Daniela S. Cruzes, Tore Dybå, Per Runeson, and Martin Höst. Case studies synthesis: a thematic, cross-case, and narrative synthesis worked example. *Empirical Software Engineering*, 20(6):1634–1665, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9326-8`.

Scanniello:2015:LAA

[572] Giuseppe Scanniello, Andrian Marcus, and Daniele Pascale. Link analysis algorithms for static concept location: an empirical assessment. *Empirical Software Engineering*, 20(6):1666–1720, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9327-7`.

McZara:2015:SRP

[573] Jason McZara, Shahryar Sarkani, Thomas Holzer, and Timothy Eveleigh. Software requirements prioritization and selection using linguistic tools and constraint solvers — a controlled experiment. *Empirical Software Engineering*, 20(6):1721–1761, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9334-8`.

Heeager:2015:OAD

[574] Lise Tordrup Heeager and Jeremy Rose. Optimising Agile development practices for the maintenance operation: nine heuristics. *Empirical Software Engineering*, 20(6):1762–1784, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9335-7`.

Kechagia:2015:CAM

[575] Maria Kechagia, Dimitris Mitropoulos, and Diomidis Spinellis. Chart-

ing the API minefield using software telemetry data. *Empirical Software Engineering*, 20(6):1785–1830, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9343-7`.

Rodrigues:2015:ECM

[576] Elder Macedo Rodrigues, Flávio Moreira de Oliveira, Leandro Teodoro Costa, Maicon Bernardino, Avelino Francisco Zorzo, Simone do Rocio Senger Souza, and Rodrigo Saad. An empirical comparison of model-based and capture and replay approaches for performance testing. *Empirical Software Engineering*, 20(6):1831–1860, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9337-5`.

Al-Baik:2015:KAB

[577] Osama Al-Baik and James Miller. The Kanban approach, between agility and leanness: a systematic review. *Empirical Software Engineering*, 20(6):1861–1897, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9340-x`.

Octaviano:2015:SAS

[578] Fábio R. Octaviano, Katia R. Felizardo, José C. Maldonado, and Sandra C. P. F. Fabbri. Semi-automatic selection of primary studies in systematic literature reviews: is it reasonable? *Empirical Software Engineering*, 20(6):1898–1917, December 2015. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9342-8`.

Anonymous:2016:AES

[579] Anonymous. Appreciation to empirical software engineering reviewers of 2015. *Empirical Software Engineering*, 21(1):1–3, February 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-015-9423-3.pdf`.

Khalili:2016:ESC

[580] Abdullah Khalili, Ashkan Sami, Mahdi Azimi, Sara Moshtari, Zahra Salehi, Mahboobe Ghiasi, and Ali Akbar Safavi. Employing secure coding practices into industrial applications: a case study. *Empirical Software Engineering*, 21(1):4–16, February 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9341-9`.

McBurney:2016:EST

[581] Paul W. McBurney and Collin McMillan. An empirical study of the textual similarity between source code and source code summaries. *Empirical Software Engineering*, 21(1):17–42, February 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9344-6`.

Ryu:2016:VCB

[582] Duksan Ryu, Okjoo Choi, and Jongmoon Baik. Value-cognitive boosting with a support vector machine for cross-project defect prediction. *Empirical Software Engineering*, 21(1): 43–71, February 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9346-4`.

Corazza:2016:WLI

[583] Anna Corazza, Sergio Di Martino, Valerio Maggio, and Giuseppe Scanniello. Weighing lexical information for software clustering in the context of architecture recovery. *Empirical Software Engineering*, 21(1):72–103, February 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9347-3`.

Arnaoudova:2016:LAW

[584] Venera Arnaoudova, Massimiliano Di Penta, and Giuliano Antoniol. Linguistic antipatterns: what they are and how developers perceive them. *Empirical Software Engineering*, 21(1):104–158, February 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9350-8`.

Guo:2016:ECT

[585] Yuepu Guo, Rodrigo Oliveira Spínola, and Carolyn Seaman. Exploring the costs of technical debt management — a case study. *Empirical Software Engineering*, 21(1):159–182, February 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9351-7`.

Allix:2016:EAM

[586] Kevin Allix, Tegawendé F. Bissyandé, Quentin Jérome, Jacques Klein, Radu State, and Yves Le Traon. Empirical assessment of machine learning-based malware detectors for Android. *Empirical Software Engineering*, 21(1): 183–211, February 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9352-6`.

Fernandez-Saez:2016:DLD

[587] Ana M. Fernández-Sáez, Marcela Genero, Danilo Caivano, and Michel R. V. Chaudron. Does the level of detail of UML diagrams affect the maintainability of source code?: a family of experiments. *Empirical Software Engineering*, 21(1):212–259, February 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9354-4`.

German:2016:CMD

[588] Daniel M. German, Bram Adams, and Ahmed E. Hassan. Continuously mining distributed version control systems: an empirical study of how Linux uses Git. *Empirical Software Engineering*, 21(1):260–299, February 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.`

com/accesspage/article/10.1007/s10664-014-9356-2.

DiPenta:2016:GES

[589] Massimiliano Di Penta and Sunghun Kim. Guest editorial: Special section on mining software repositories. *Empirical Software Engineering*, 21 (2):301–302, April 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-016-9428-6.pdf.

Herzig:2016:ITC

[590] Kim Herzig, Sascha Just, and Andreas Zeller. The impact of tangled code changes on defect prediction models. *Empirical Software Engineering*, 21(2): 303–336, April 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9376-6.

Wang:2016:IBM

[591] Shaohua Wang, Foutse Khomh, and Ying Zou. Improving bug management using correlations in crash reports. *Empirical Software Engineering*, 21(2): 337–367, April 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-014-9333-9.

Hindle:2016:CAT

[592] Abram Hindle, Anahita Alipour, and Eleni Stroulia. A contextual approach towards more accurate duplicate bug report detection and ranking. *Empirical Software Engineering*, 21(2): 368–410, April 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9387-3.

Koziolek:2016:ASP

[593] Heiko Koziolek, Thomas Goldschmidt, Thijmen de Gooijer, Dominik Domis, Stephan Sehestedt, Thomas Gamer, and Markus Aleksy. Assessing software product line potential: an exploratory industrial case study. *Empirical Software Engineering*, 21(2): 411–448, April 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-014-9358-0.

Hunsen:2016:PBV

[594] Claus Hunsen, Bo Zhang, Janet Siegmund, Christian Kästner, Olaf Leßenich, Martin Becker, and Sven Apel. Preprocessor-based variability in open-source and industrial software systems: An empirical study. *Empirical Software Engineering*, 21(2): 449–482, April 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9360-1.

Vidal:2016:UAE

[595] Santiago A. Vidal, Alexandre Bergel, Claudia Marcos, and J. Andrés Díaz-Pace. Understanding and addressing exhibitionism in Java empirical research about method accessibility. *Empirical Software Engineering*, 21(2): 483–516, April 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.

springer.com/accesspage/article/10.1007/s10664-015-9365-9.

Cheung:2016:DNM

[596] Wai Ting Cheung, Sukyoung Ryu, and Sunghun Kim. Development nature matters: An empirical study of code clones in JavaScript applications. *Empirical Software Engineering*, 21(2): 517–564, April 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9368-6.

Kim:2016:AII

[597] Suntae Kim and Dongsun Kim. Automatic identifier inconsistency detection using code dictionary. *Empirical Software Engineering*, 21(2): 565–604, April 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9369-5.

Misirli:2016:SHI

[598] Ayse Tosun Misirli, Emad Shihab, and Yasukata Kamei. Studying high impact fix-inducing changes. *Empirical Software Engineering*, 21(2): 605–641, April 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9370-z. See erratum [675].

Scholtes:2016:ARL

[599] Ingo Scholtes, Pavlin Mavrodiev, and Frank Schweitzer. From Aristotle to Ringelmann: a large-scale analysis of team productivity and coordination in Open Source Software projects. *Empirical Software Engineering*, 21(2): 642–683, April 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9406-4.

Munir:2016:OIS

[600] Hussan Munir, Krzysztof Wnuk, and Per Runeson. Open innovation in software engineering: a systematic mapping study. *Empirical Software Engineering*, 21(2):684–723, April 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9380-x.

Damevski:2016:FSH

[601] Kostadin Damevski, David Shepherd, and Lori Pollock. A field study of how developers locate features in source code. *Empirical Software Engineering*, 21(2):724–747, April 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9373-9.

Robbes:2016:GES

[602] Romain Robbes, Rocco Oliveto, and Massimiliano Di Penta. Guest editorial: special section on software reverse engineering. *Empirical Software Engineering*, 21(3):749–752, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-016-9433-9.pdf.

Chen:2016:DCM

[603] Xi Chen, Asia Slowinska, and Herbert Bos. On the detection of custom memory allocators in C binaries. *Empirical Software Engineering*, 21(3):753–777, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-015-9362-z.pdf`.

Haller:2016:SDS

[604] Istvan Haller, Asia Slowinska, and Herbert Bos. Scalable data structure detection and classification for C/C++ binaries. *Empirical Software Engineering*, 21(3):778–810, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-015-9363-y.pdf`.

Walkinshaw:2016:IEF

[605] Neil Walkinshaw, Ramsay Taylor, and John Derrick. Inferring extended finite state machine models from software executions. *Empirical Software Engineering*, 21(3):811–853, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9367-7`.

Maffort:2016:MAV

[606] Cristiano Maffort, Marco Tulio Valente, Ricardo Terra, Mariza Bigonha, Nicolas Anquetil, and André Hora. Mining architectural violations from version history. *Empirical Software Engineering*, 21(3):854–895, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9348-2`.

Jaafar:2016:EID

[607] Fehmi Jaafar, Yann-Gaël Guéhéneuc, Sylvie Hamel, Foutse Khomh, and Mohammad Zulkernine. Evaluating the impact of design pattern and anti-pattern dependencies on changes and faults. *Empirical Software Engineering*, 21(3):896–931, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9361-0`.

Baysal:2016:ITN

[608] Olga Baysal, Oleksii Kononenko, Reid Holmes, and Michael W. Godfrey. Investigating technical and non-technical factors influencing modern code review. *Empirical Software Engineering*, 21(3):932–959, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9366-8`.

Adams:2016:ESI

[609] Bram Adams, Ryan Kavanagh, Ahmed E. Hassan, and Daniel M. German. An empirical study of integration activities in distributions of open source software. *Empirical Software Engineering*, 21(3):960–1001, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9371-y`.

Calefato:2016:AIR

[610] Fabio Calefato, Filippo Lanubile, Tayana Conte, and Rafael Prikladnicki. Assessing the impact of real-time machine translation on multilingual meetings in global software projects. *Empirical Software Engineering*, 21(3): 1002–1034, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9372-x`.

Tu:2016:EIT

[611] Yu-Cheng Tu, Ewan Tempero, and Clark Thomborson. An experiment on the impact of transparency on the effectiveness of requirements documents. *Empirical Software Engineering*, 21(3): 1035–1066, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9374-8`.

McIlroy:2016:AAL

[612] Stuart McIlroy, Nasir Ali, Hammad Khalid, and Ahmed E. Hassan. Analyzing and automatically labelling the types of user issues that are raised in mobile app reviews. *Empirical Software Engineering*, 21(3): 1067–1106, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9375-7`.

Abebe:2016:ESS

[613] Surafel Lemma Abebe, Nasir Ali, and Ahmed E. Hassan. An empirical study of software release notes. *Empirical Software Engineering*, 21(3): 1107–1142, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9377-5`.

Fontana:2016:CEM

[614] Francesca Arcelli Fontana, Mika V. Mäntylä, Marco Zanoni, and Alessandro Marino. Comparing and experimenting machine learning techniques for code smell detection. *Empirical Software Engineering*, 21(3): 1143–1191, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9378-4`.

Rosen:2016:WMD

[615] Christoffer Rosen and Emad Shihab. What are mobile developers asking about? A large scale study using Stack Overflow. *Empirical Software Engineering*, 21(3):1192–1223, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9379-3`.

Grigera:2016:ARU

[616] Julián Grigera, Alejandra Garrido, Jose Ignacio Panach, Damiano Distante, and Gustavo Rossi. Assessing refactorings for usability in e-commerce applications. *Empirical Software Engineering*, 21(3):1224–1271, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9384-6`.

Alnaeli:2016:EEP

[617] Saleh M. Alnaeli, Jonathan I. Maletic, and Michael L. Collard. An empirical examination of the prevalence of inhibitors to the parallelizability of open source software systems. *Empirical Software Engineering*, 21(3): 1272–1301, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9385-5`.

deFranca:2016:EDS

[618] Breno Bernard Nicolau de França and Guilherme Horta Travassos. Experimentation with dynamic simulation models in software engineering: planning and reporting guidelines. *Empirical Software Engineering*, 21(3): 1302–1345, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9386-4`.

McIlroy:2016:FAE

[619] Stuart McIlroy, Nasir Ali, and Ahmed E. Hassan. Fresh apps: an empirical study of frequently-updated mobile apps in the Google Play store. *Empirical Software Engineering*, 21(3): 1346–1370, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9388-2`.

Dietrich:2016:WJD

[620] Jens Dietrich, Kamil Jezek, and Premek Brada. What Java developers know about compatibility, and why this matters. *Empirical Software Engineering*, 21(3):1371–1396, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9389-1`.

Chen:2016:PRP

[621] Jie Chen, Junchao Xiao, Qing Wang, Leon J. Osterweil, and Mingshu Li. Perspectives on refactoring planning and practice: an empirical study. *Empirical Software Engineering*, 21(3): 1397–1436, June 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9390-8`.

Assar:2016:UTC

[622] Saïd Assar, Markus Borg, and Dietmar Pfahl. Using text clustering to predict defect resolution time: a conceptual replication and an evaluation of prediction accuracy. *Empirical Software Engineering*, 21(4):1437–1475, August 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9391-7`.

Chatterji:2016:CCD

[623] Debarshi Chatterji, Jeffrey C. Carver, and Nicholas A. Kraft. Code clones and developer behavior: results of two surveys of the clone research community. *Empirical Software Engineering*, 21(4): 1476–1508, August 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9394-4`.

Kosti:2016:APS

[624] Makrina Viola Kosti, Robert Feldt, and Lefteris Angelis. Archetypal personalities of software engineers and their work preferences: a new perspective for empirical studies. *Empirical Software Engineering*, 21(4): 1509–1532, August 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9395-3`.

Jonsson:2016:ABA

[625] Leif Jonsson, Markus Borg, David Broman, Kristian Sandahl, Sigrid Eldh, and Per Runeson. Automated bug assignment: Ensemble-based machine learning in large scale industrial contexts. *Empirical Software Engineering*, 21(4):1533–1578, August 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9401-9`.

Bagheri:2016:FSI

[626] Ebrahim Bagheri, David Benavides, Klaus Schmid, and Per Runeson. Foreword to the special issue on empirical evidence on software product line engineering. *Empirical Software Engineering*, 21(4):1579–1585, August 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/content/pdf/10.1007/s10664-016-9439-3.pdf`.

Wang:2016:STC

[627] Shuai Wang, Shaukat Ali, Arnaud Gotlieb, and Marius Liaaen. A systematic test case selection methodology for product lines: results and insights from an industrial case study. *Empirical Software Engineering*, 21(4): 1586–1622, August 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9345-5`.

Myllarniemi:2016:PVS

[628] Varvana Myllärniemi, Juha Savolainen, Mikko Raatikainen, and Tomi Männistö. Performance variability in software product lines: proposing theories from a case study. *Empirical Software Engineering*, 21(4):1623–1669, August 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9359-z`.

Sobernig:2016:QSA

[629] Stefan Sobernig, Sven Apel, Sergiy Kolesnikov, and Norbert Siegmund. Quantifying structural attributes of system decompositions in 28 feature-oriented software product lines. *Empirical Software Engineering*, 21(4): 1670–1705, August 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-014-9336-6`.

Asadi:2016:EVI

[630] Mohsen Asadi, Samaneh Soltani, Dragan Gašević, and Marek Hatala. The effects of visualization and interaction techniques on feature model configuration. *Empirical Software Engineering*, 21(4):1706–1743, August 2016. CODEN ESENFW. ISSN

1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-014-9353-5.

Passos:2016:CVM

[631] Leonardo Passos, Leopoldo Teixeira, Nicolas Dintzner, Sven Apel, Andrzej Wąsowski, Krzysztof Czarnecki, Paulo Borba, and Jianmei Guo. Coevolution of variability models and related software artifacts. *Empirical Software Engineering*, 21(4):1744–1793, August 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9364-x.

Becan:2016:BOK

[632] Guillaume Bécan, Mathieu Acher, Benoit Baudry, and Sana Ben Nasr. Breathing ontological knowledge into feature model synthesis: an empirical study. *Empirical Software Engineering*, 21(4):1794–1841, August 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-014-9357-1.

Chen:2016:SUT

[633] Tse-Hsun Chen, Stephen W. Thomas, and Ahmed E. Hassan. A survey on the use of topic models when mining software repositories. *Empirical Software Engineering*, 21(5):1843–1919, October 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9402-8.

Hafiz:2016:GDH

[634] Munawar Hafiz and Ming Fang. Game of detections: how are security vulnerabilities discovered in the wild? *Empirical Software Engineering*, 21(5):1920–1959, October 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9403-7.

Rakha:2016:SNE

[635] Mohamed Sami Rakha, Weiyi Shang, and Ahmed E. Hassan. Studying the needed effort for identifying duplicate issues. *Empirical Software Engineering*, 21(5):1960–1989, October 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9404-6.

Soetens:2016:CBT

[636] Quinten David Soetens, Serge Demeyer, Andy Zaidman, and Javier Pérez. Change-based test selection: an empirical evaluation. *Empirical Software Engineering*, 21(5):1990–2032, October 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9405-5.

Pinzger:2016:GEM

[637] Martin Pinzger and Sunghun Kim. Guest editorial: mining software repositories. *Empirical Software Engineering*, 21(5):2033–2034, October 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.

com/content/pdf/10.1007/s10664-016-9450-8.pdf.

Kalliamvakou:2016:DSP

[638] Eirini Kalliamvakou, Georgios Gousios, Kelly Blincoe, Leif Singer, Daniel M. German, and Daniela Damian. An in-depth study of the promises and perils of mining GitHub. *Empirical Software Engineering*, 21(5):2035–2071, October 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9393-5.

Kamei:2016:SJT

[639] Yasutaka Kamei, Takafumi Fukushima, Shane McIntosh, Kazuhiro Yamashita, Naoyasu Ubayashi, and Ahmed E. Hassan. Studying just-in-time defect prediction using cross-project models. *Empirical Software Engineering*, 21(5):2072–2106, October 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9400-x.

Zhang:2016:TBU

[640] Feng Zhang, Audris Mockus, Iman Keivanloo, and Ying Zou. Towards building a universal defect prediction model with rank transformed predictors. *Empirical Software Engineering*, 21(5):2107–2145, October 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9396-2.

McIntosh:2016:ESI

[641] Shane McIntosh, Yasutaka Kamei, Bram Adams, and Ahmed E. Hassan. An empirical study of the impact of modern code review practices on software quality. *Empirical Software Engineering*, 21(5):2146–2189, October 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9381-9.

Ponzanelli:2016:P

[642] Luca Ponzanelli, Gabriele Bavota, Massimiliano Di Penta, Rocco Oliveto, and Michele Lanza. Prompter. *Empirical Software Engineering*, 21(5):2190–2231, October 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9397-1.

Wang:2016:CTC

[643] Yi Wang and David Redmiles. Cheap talk, cooperation, and trust in global software engineering. *Empirical Software Engineering*, 21(6):2233–2267, December 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9407-3.

Nguyen:2016:AMA

[644] Viet Hung Nguyen, Stanislav Dashevskyi, and Fabio Massacci. An automatic method for assessing the versions affected by a vulnerability. *Empirical Software Engineering*, 21(6):2268–2297, December 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-

7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9408-2.

Tian:2016:UBS

[645] Yuan Tian, Nasir Ali, David Lo, and Ahmed E. Hassan. On the unreliability of bug severity data. *Empirical Software Engineering*, 21(6):2298–2323, December 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9409-1.

Unterkalmsteiner:2016:LSI

[646] Michael Unterkalmsteiner, Tony Gorschek, Robert Feldt, and Niklas Lavesson. Large-scale information retrieval in software engineering- an experience report from industrial application. *Empirical Software Engineering*, 21(6):2324–2365, December 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9410-8.

Wu:2016:ESA

[647] Wei Wu, Foutse Khomh, Bram Adams, Yann-Gaël Guéhéneuc, and Giuliano Antoniol. An exploratory study of API changes and usages based on Apache and Eclipse ecosystems. *Empirical Software Engineering*, 21(6):2366–2412, December 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9411-7.

Li:2016:ASR

[648] Xiang Li, Chetan Mutha, and Carol S. Smidts. An automated software reliability prediction system for safety critical software. *Empirical Software Engineering*, 21(6):2413–2455, December 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9412-6.

Kessentini:2016:GES

[649] Marouane Kessentini and Günther Ruhe. A guest editorial: special section on search-based software engineering. *Empirical Software Engineering*, 21(6):2456–2458, December 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/content/pdf/10.1007/s10664-016-9474-0.pdf.

Ali:2016:IPO

[650] Shaukat Ali, Muhammad Zohaib Iqbal, Maham Khalid, and Andrea Arcuri. Improving the performance of OCL constraint solving with novel heuristics for logical operations: a search-based approach. *Empirical Software Engineering*, 21(6):2459–2502, December 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/accesspage/article/10.1007/s10664-015-9392-6.

Mkaouer:2016:UMQ

[651] Mohamed Wiem Mkaouer, Marouane Kessentini, Slim Bechikh, Mel Ó Cinnéide, and Kalyanmoy Deb. On the use of many quality attributes

for software refactoring: a many-objective search-based software engineering approach. *Empirical Software Engineering*, 21(6):2503–2545, December 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9414-4`.

Ramirez:2016:CSM

[652] Aurora Ramírez, José Raúl Romero, and Sebastián Ventura. A comparative study of many-objective evolutionary algorithms for the discovery of software architectures. *Empirical Software Engineering*, 21(6):2546–2600, December 2016. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/accesspage/article/10.1007/s10664-015-9399-z`.

Anonymous:2017:AES

[653] Anonymous. Appreciation to *Empirical Software Engineering* reviewers of 2016. *Empirical Software Engineering*, 22(1):1–5, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9495-8`.

Luo:2017:FFP

[654] Qi Luo, Aswathy Nair, Mark Grechanik, and Denys Poshyvanyk. FOREPOST: finding performance problems automatically with feedback-directed learning software testing. *Empirical Software Engineering*, 22(1):6–56, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-015-9413-5`.

Vitharana:2017:DPP

[655] Padmal Vitharana. Defect propagation at the project-level: results and a post-hoc analysis on inspection efficiency. *Empirical Software Engineering*, 22 (1):57–79, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-015-9415-3`.

Niknafs:2017:IDK

[656] Ali Niknafs and Daniel Berry. The impact of domain knowledge on the effectiveness of requirements engineering activities. *Empirical Software Engineering*, 22(1):80–133, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-015-9416-2`.

Bao:2017:EAT

[657] Lingfeng Bao, Jing Li, Zhenchang Xing, Xinyu Wang, Xin Xia, and Bo Zhou. Extracting and analyzing time-series HCI data from screen-captured task videos. *Empirical Software Engineering*, 22(1): 134–174, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-015-9417-1`.

Li:2017:ZRS

[658] Yan Li, Tao Yue, Shaukat Ali, and Li Zhang. Zen-ReqOptimizer: a search-based approach for requirements assignment optimization. *Em-*

pirical Software Engineering, 22(1): 175–234, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-015-9418-0`.

Charpentier:2017:RRC

[659] Alan Charpentier, Jean-Rémy Falleri, Floréal Morandat, Elyas Ben Hadj Yahia, and Laurent Réveillère. Raters' reliability in clone benchmarks construction. *Empirical Software Engineering*, 22(1):235–258, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-015-9419-z`.

Niu:2017:LRC

[660] Haoran Niu, Iman Keivanloo, and Ying Zou. Learning to rank code examples for code search engines. *Empirical Software Engineering*, 22(1): 259–291, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-015-9421-5`.

OCinneide:2017:ESB

[661] Mel Ó Cinnéide, Iman Hemati Moghadam, Mark Harman, Steve Counsell, and Laurence Tratt. An experimental search-based approach to cohesion metric evaluation. *Empirical Software Engineering*, 22(1): 292–329, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9427-7`.

Chen:2017:CLP

[662] Boyuan Chen and Zhen Ming (Jack) Jiang. Characterizing logging practices in Java-based open source software projects — a replication study in Apache Software Foundation. *Empirical Software Engineering*, 22(1): 330–374, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9429-5`.

Ye:2017:SDK

[663] Deheng Ye, Zhenchang Xing, and Nachiket Kapre. The structure and dynamics of knowledge network in domain-specific Q&A sites: a case study of stack overflow. *Empirical Software Engineering*, 22(1):375–406, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9430-z`.

Kavaler:2017:SAO

[664] David Kavaler and Vladimir Filkov. Stochastic actor-oriented modeling for studying homophily and social influence in OSS projects. *Empirical Software Engineering*, 22(1):407–435, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9431-y`.

Park:2017:ESS

[665] Jihun Park, Miryung Kim, and Doo-Hwan Bae. An empirical study of supplementary patches in open source

projects. *Empirical Software Engineering*, 22(1):436–473, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9432-x`.

Phannachitta:2017:SAS

[666] Passakorn Phannachitta, Jacky Keung, Akito Monden, and Kenichi Matsumoto. A stability assessment of solution adaptation techniques for analogy-based software effort estimation. *Empirical Software Engineering*, 22(1): 474–504, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9434-8`.

Hassan:2017:ESE

[667] Safwat Hassan, Weiyi Shang, and Ahmed E. Hassan. An empirical study of emergency updates for top Android mobile apps. *Empirical Software Engineering*, 22(1):505–546, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9435-7`.

Jiang:2017:WHD

[668] Jing Jiang, David Lo, Jiahuan He, Xin Xia, Pavneet Singh Kochhar, and Li Zhang. Why and how developers fork what from whom in GitHub. *Empirical Software Engineering*, 22 (1):547–578, February 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9436-6`.

Kitchenham:2017:RSM

[669] Barbara Kitchenham, Lech Madeyski, David Budgen, Jacky Keung, Pearl Brereton, Stuart Charters, Shirley Gibbs, and Amnart Pohthong. Robust statistical methods for empirical software engineering. *Empirical Software Engineering*, 22(2):579–630, April 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9437-5`.

Jiang:2017:DPD

[670] Siyuan Jiang, Collin McMillan, and Raul Santelices. Do programmers do change impact analysis in debugging? *Empirical Software Engineering*, 22(2):631–669, April 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9441-9`.

Kessentini:2017:SBD

[671] Marouane Kessentini, Usman Mansoor, Manuel Wimmer, Ali Ouni, and Kalyanmoy Deb. Search-based detection of model level changes. *Empirical Software Engineering*, 22(2):670–715, April 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9442-8`.

Lokan:2017:IUM

[672] Chris Lokan and Emilia Mendes. Investigating the use of moving windows to improve software effort prediction: a replicated study. *Empirical Software Engineering*, 22(2):716–767,

April 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-016-9446-4.

Thongtanunam:2017:RPM

[673] Patanamon Thongtanunam, Shane McIntosh, Ahmed E. Hassan, and Hajimu Iida. Review participation in modern code review. *Empirical Software Engineering*, 22(2):768–817, April 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-016-9452-6.

Duarte:2017:PPR

[674] Carlos Henrique C. Duarte. Productivity paradoxes revisited. *Empirical Software Engineering*, 22(2):818–847, April 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-016-9453-5.

Tosun:2017:ESH

[675] Ayse Tosun, Emad Shihab, and Yasutaka Kamei. Erratum to: Studying high impact fix-inducing changes. *Empirical Software Engineering*, 22 (2):848, April 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-016-9455-3. See [598].

LeGoues:2017:GES

[676] Claire Le Goues and Shin Yoo. Guest editorial for special section on research in search-based software engineering. *Empirical Software Engineering*, 22 (2):849–851, April 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9504-6.

Rojas:2017:DIE

[677] José Miguel Rojas, Mattia Vivanti, Andrea Arcuri, and Gordon Fraser. A detailed investigation of the effectiveness of whole test suite generation. *Empirical Software Engineering*, 22(2):852–893, April 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-015-9424-2.

Mkaouer:2017:RMO

[678] Mohamed Wiem Mkaouer, Marouane Kessentini, Mel Ó Cinnéide, Shinpei Hayashi, and Kalyanmoy Deb. A robust multi-objective approach to balance severity and importance of refactoring opportunities. *Empirical Software Engineering*, 22(2):894–927, April 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-016-9426-8.

Kifetew:2017:GVG

[679] Fitsum Meshesha Kifetew, Roberto Tiella, and Paolo Tonella. Generating valid grammar-based test inputs by means of genetic programming and annotated grammars. *Empirical Software Engineering*, 22(2):928–961, April 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-015-9422-4.

Mader:2017:ESS

[680] Patrick Mäder, Rocco Olivetto, and Andrian Marcus. Empirical studies in software and systems traceability. *Empirical Software Engineering*, 22(3):963–966, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9509-1`.

Staahl:2017:ATL

[681] Daniel Ståhl, Kristofer Hallén, and Jan Bosch. Achieving traceability in large scale continuous integration and delivery deployment, usage and validation of the Eiffel framework. *Empirical Software Engineering*, 22(3):967–995, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9457-1`.

Falessi:2017:ENR

[682] Davide Falessi, Massimiliano Di Penta, Gerardo Canfora, and Giovanni Cantone. Estimating the number of remaining links in traceability recovery. *Empirical Software Engineering*, 22(3):996–1027, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9460-6`.

Zogaan:2017:ATS

[683] Waleed Zogaan, Ibrahim Mujhid, Joanna C. S. Santos, Danielle Gonzalez, and Mehdi Mirakhorli. Automated training-set creation for software architecture traceability problem. *Empirical Software Engineering*, 22(3):1028–1062, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9476-y`.

Sharif:2017:EMS

[684] Bonita Sharif, John Meinken, Timothy Shaffer, and Huzefa Kagdi. Eye movements in software traceability link recovery. *Empirical Software Engineering*, 22(3):1063–1102, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9486-9`.

Guo:2017:TTM

[685] Jin Guo, Marek Gibiec, and Jane Cleland-Huang. Tackling the term-mismatch problem in automated trace retrieval. *Empirical Software Engineering*, 22(3):1103–1142, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9479-8`.

Robbes:2017:GEM

[686] Romain Robbes, Yasutaka Kamei, and Martin Pinzger. Guest editorial: Mining software repositories. *Empirical Software Engineering*, 22 (3):1143–1145, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9527-z`.

Behnamghader:2017:LSS

[687] Pooyan Behnamghader, Duc Minh Le, Joshua Garcia, Daniel Link, Arman

Shahbazian, and Nenad Medvidovic. A large-scale study of architectural evolution in open-source software systems. *Empirical Software Engineering*, 22(3):1146–1193, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9466-0`.

Wu:2017:ALI

[688] Yuhao Wu, Yuki Manabe, Tetsuya Kanda, Daniel M. German, and Katsuro Inoue. Analysis of license inconsistency in large collections of open source projects. *Empirical Software Engineering*, 22(3):1194–1222, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9487-8`.

Choetkiertikul:2017:PDI

[689] Morakot Choetkiertikul, Hoa Khanh Dam, Truyen Tran, and Aditya Ghose. Predicting the delay of issues with due dates in software projects. *Empirical Software Engineering*, 22(3):1223–1263, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9496-7`.

Coelho:2017:EHB

[690] Roberta Coelho, Lucas Almeida, Georgios Gousios, Arie van Deursen, and Christoph Treude. Exception handling bug hazards in Android. *Empirical Software Engineering*, 22(3):1264–1304, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9443-7`.

Munaiah:2017:DBF

[691] Nuthan Munaiah, Felivel Camilo, Wesley Wigham, Andrew Meneely, and Meiyappan Nagappan. Do bugs foreshadow vulnerabilities? An in-depth study of the Chromium Project. *Empirical Software Engineering*, 22(3):1305–1347, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9447-3`.

Sawant:2017:FGF

[692] Anand Ashok Sawant and Alberto Bacchelli. fine-GRAPE: fine-grained APi usage extractor — an approach and dataset to investigate API usage. *Empirical Software Engineering*, 22(3):1348–1371, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9444-6`.

Spinellis:2017:RUH

[693] Diomidis Spinellis. A repository of Unix history and evolution. *Empirical Software Engineering*, 22(3):1372–1404, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9445-5`; `http://www.spinellis.gr/pubs/jrnl/2016-EMPSE-unix-history/html/unix-history.html`; `http://www.spinellis.gr/pubs/jrnl/2016-EMPSE-unix-history/html/unix-history.pdf`.

Caneill:2017:DDT

[694] Matthieu Caneill, Daniel M. Germán, and Stefano Zacchiroli. The Debsources Dataset: two decades of free and open source software. *Empirical Software Engineering*, 22(3):1405–1437, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9461-5`.

Oliveto:2017:GEP

[695] Rocco Oliveto and Christian Bird. Guest editorial: Program comprehension. *Empirical Software Engineering*, 22(3):1438–1439, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9525-1`.

Jbara:2017:HPR

[696] Ahmad Jbara and Dror G. Feitelson. How programmers read regular code: a controlled experiment using eye tracking. *Empirical Software Engineering*, 22(3):1440–1477, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9477-x`.

MacLeod:2017:DSS

[697] Laura MacLeod, Andreas Bergen, and Margaret-Anne Storey. Documenting and sharing software knowledge using screencasts. *Empirical Software Engineering*, 22(3):1478–1507, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9501-9`.

Beller:2017:LLE

[698] Moritz Beller, Andy Zaidman, Andrey Karpov, and Rolf A. Zwaan. The last line effect explained. *Empirical Software Engineering*, 22(3):1508–1536, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9489-6`.

Vendome:2017:LUC

[699] Christopher Vendome, Gabriele Bavota, Massimiliano Di Penta, Mario Linares-Vásquez, Daniel German, and Denys Poshyvanyk. License usage and changes: a large-scale study on gitHub. *Empirical Software Engineering*, 22 (3):1537–1577, June 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9438-4`.

Shi:2017:MBS

[700] Ying Shi, Ming Li, Steven Arndt, and Carol Smidts. Metric-based software reliability prediction approach and its application. *Empirical Software Engineering*, 22(4):1579–1633, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9425-9`.

Wu:2017:AQI

[701] Ji Wu, Shaukat Ali, Tao Yue, Jie Tian, and Chao Liu. Assessing the quality of industrial avionics software: an

extensive empirical evaluation. *Empirical Software Engineering*, 22(4): 1634–1683, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9440-x`.

Li:2017:WLL

[702] Heng Li, Weiyi Shang, and Ahmed E. Hassan. Which log level should developers choose for a new logging statement? *Empirical Software Engineering*, 22(4):1684–1716, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9456-2`.

Stavropoulou:2017:CSW

[703] Ioanna Stavropoulou, Marios Grigoriou, and Kostas Kontogiannis. Case study on which relations to use for clustering-based software architecture recovery. *Empirical Software Engineering*, 22(4):1717–1762, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9459-z`.

Assuncao:2017:MOR

[704] Wesley K. G. Assunção, Roberto E. Lopez-Herrejon, Lukas Linsbauer, Silvia R. Vergilio, and Alexander Egyed. Multi-objective reverse engineering of variability-safe feature models based on code dependencies of system variants. *Empirical Software Engineering*, 22(4): 1763–1794, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9462-4`.

Gharehyazie:2017:TDC

[705] Mohammad Gharehyazie and Vladimir Filkov. Tracing distributed collaborative development in Apache software foundation projects. *Empirical Software Engineering*, 22(4):1795–1830, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9463-3`.

Li:2017:TJT

[706] Heng Li, Weiyi Shang, Ying Zou, and Ahmed E. Hassan. Towards just-in-time suggestions for log changes. *Empirical Software Engineering*, 22(4): 1831–1865, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9467-z`.

Herbold:2017:GVL

[707] Steffen Herbold, Alexander Trautsch, and Jens Grabowski. Global vs. local models for cross-project defect prediction. *Empirical Software Engineering*, 22(4):1866–1902, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9468-y`.

Menzies:2017:DIH

[708] Tim Menzies, William Nichols, Forrest Shull, and Lucas Layman. Are delayed issues harder to resolve? Re-

visiting cost-to-fix of defects throughout the lifecycle. *Empirical Software Engineering*, 22(4):1903–1935, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9469-x`.

Martinez:2017:ARR

[709] Matias Martinez, Thomas Durieux, Romain Sommerard, Jifeng Xuan, and Martin Monperrus. Automatic repair of real bugs in Java: a large-scale experiment on the `defects4j` dataset. *Empirical Software Engineering*, 22(4):1936–1964, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9470-4`.

Mahmoud:2017:STM

[710] Anas Mahmoud and Gary Bradshaw. Semantic topic models for source code analysis. *Empirical Software Engineering*, 22(4):1965–2000, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9473-1`.

Sakhnini:2017:GVI

[711] Victoria Sakhnini, Luisa Mich, and Daniel M. Berry. Group versus individual use of power-only EPMcreate as a creativity enhancement technique for requirements elicitation. *Empirical Software Engineering*, 22(4):2001–2049, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9475-z`.

Joblin:2017:ETD

[712] Mitchell Joblin, Sven Apel, and Wolfgang Mauerer. Evolutionary trends of developer coordination: a network approach. *Empirical Software Engineering*, 22(4):2050–2094, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9478-9`.

Lin:2017:SUU

[713] Dayi Lin, Cor-Paul Bezemer, and Ahmed E. Hassan. Studying the urgent updates of popular games on the Steam platform. *Empirical Software Engineering*, 22(4):2095–2126, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9480-2`.

Riaz:2017:IIF

[714] Maria Riaz, Jason King, John Slankas, Laurie Williams, Fabio Massacci, Christian Quesada-López, and Marcelo Jenkins. Identifying the implied: Findings from three differentiated replications on the use of security requirements templates. *Empirical Software Engineering*, 22(4):2127–2178, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9481-1`.

Lenberg:2017:IAS

[715] Per Lenberg, Lars Göran Wallgren Tengberg, and Robert Feldt. An initial analysis of software engineers' attitudes towards organizational change. *Empirical Software Engineering*, 22(4): 2179–2205, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9482-0; http://link.springer.com/content/pdf/10.1007/s10664-016-9482-0.pdf`.

Johanson:2017:EED

[716] Arne N. Johanson and Wilhelm Hasselbring. Effectiveness and efficiency of a domain-specific language for high-performance marine ecosystem simulation: a controlled experiment. *Empirical Software Engineering*, 22(4): 2206–2236, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9483-z`.

Le:2017:WLT

[717] Tien-Duy B. Le, Ferdian Thung, and David Lo. Will this localization tool be effective for this bug? Mitigating the impact of unreliability of information retrieval based bug localization tools. *Empirical Software Engineering*, 22(4): 2237–2279, August 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9484-y`.

Mantyla:2017:GES

[718] Mika V. Mäntylä, Magne Jørgensen, Paul Ralph, and Hakan Erdogmus. Guest editorial for special section on success and failure in software engineering. *Empirical Software Engineering*, 22(5):2281–2297, October 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9505-5; http://link.springer.com/content/pdf/10.1007/s10664-017-9505-5.pdf`.

Fernandez:2017:NPR

[719] D. Méndez Fernández, S. Wagner, M. Kalinowski, M. Felderer, P. Mafra, A. Vetrò, T. Conte, M.-T. Christiansson, D. Greer, C. Lassenius, T. Männistö, M. Nayabi, M. Oivo, B. Penzenstadler, D. Pfahl, and et al. Naming the pain in requirements engineering. *Empirical Software Engineering*, 22(5):2298–2338, October 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9451-7`.

Bano:2017:USS

[720] Muneera Bano, Didar Zowghi, and Francesca da Rimini. User satisfaction and system success: an empirical exploration of user involvement in software development. *Empirical Software Engineering*, 22(5):2339–2372, October 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9465-1`.

Bajwa:2017:TFC

[721] Sohaib Shahid Bajwa, Xiaofeng Wang, Anh Nguyen Duc, and Pekka Abra-

hamsson. "Failures" to be celebrated: an analysis of major pivots of software startups. *Empirical Software Engineering*, 22(5):2373–2408, October 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9458-0`.

Lehtinen:2017:ROP

[722] Timo O. A. Lehtinen, Juha Itkonen, and Casper Lassenius. Recurring opinions or productive improvements — what agile teams actually discuss in retrospectives. *Empirical Software Engineering*, 22(5):2409–2452, October 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9464-2; http://link.springer.com/content/pdf/10.1007/s10664-016-9464-2.pdf`.

Paige:2017:FSS

[723] Richard F. Paige, Jordi Cabot, and Neil A. Ernst. Foreword to the special section on negative results in software engineering. *Empirical Software Engineering*, 22(5):2453–2456, October 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9498-0; http://link.springer.com/content/pdf/10.1007/s10664-017-9498-0.pdf`.

Dieste:2017:EEE

[724] Oscar Dieste, Alejandrina M. Aranda, Fernando Uyaguari, Burak Turhan, Ayse Tosun, Davide Fucci, Markku Oivo, and Natalia Juristo. Empirical evaluation of the effects of experience on code quality and programmer productivity: an exploratory study. *Empirical Software Engineering*, 22(5):2457–2542, October 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9471-3`.

Jongeling:2017:NRW

[725] Robbert Jongeling, Proshanta Sarkar, Subhajit Datta, and Alexander Serebrenik. On negative results when using sentiment analysis tools for software engineering research. *Empirical Software Engineering*, 22(5):2543–2584, October 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9493-x; http://link.springer.com/content/pdf/10.1007/s10664-016-9493-x.pdf`.

Gil:2017:CBS

[726] Yossi Gil and Gal Lalouche. On the correlation between size and metric validity. *Empirical Software Engineering*, 22(5):2585–2611, October 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9513-5`.

Sabane:2017:FBC

[727] Aminata Sabané, Yann-Gaël Guéhéneuc, Venera Arnaoudova, and Giuliano Antoniol. Fragile base-class problem, problem? *Empirical Software Engineering*, 22(5):2612–2657, October 2017. CODEN ESENFW. ISSN

1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-016-9448-2.

Menzies:2017:NRS

[728] Tim Menzies, Ye Yang, George Mathew, Barry Boehm, and Jairus Hihn. Negative results for software effort estimation. *Empirical Software Engineering*, 22(5):2658–2683, October 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-016-9472-2.

King:2017:LLU

[729] Jason King, Jon Stallings, Maria Riaz, and Laurie Williams. To log, or not to log: using heuristics to identify mandatory log events — a controlled experiment. *Empirical Software Engineering*, 22(5):2684–2717, October 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-016-9449-1.

Palomares:2017:RRR

[730] Cristina Palomares, Carme Quer, and Xavier Franch. Requirements reuse and requirement patterns: a state of the practice survey. *Empirical Software Engineering*, 22(6):2719–2762, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-016-9485-x.

Tosun:2017:IEE

[731] Ayse Tosun, Oscar Dieste, Davide Fucci, Sira Vegas, Burak Turhan, Hakan Erdogmus, Adrian Santos, Markku Oivo, Kimmo Toro, Janne Jarvinen, and Natalia Juristo. An industry experiment on the effects of test-driven development on external quality and productivity. *Empirical Software Engineering*, 22(6):2763–2805, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-016-9490-0.

Malhotra:2017:ESS

[732] Ruchika Malhotra and Megha Khanna. An empirical study for software change prediction using imbalanced data. *Empirical Software Engineering*, 22(6):2806–2851, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-016-9488-7.

Kuhrmann:2017:PDL

[733] Marco Kuhrmann, Daniel Méndez Fernández, and Maya Daneva. On the pragmatic design of literature studies in software engineering: an experience-based guideline. *Empirical Software Engineering*, 22(6):2852–2891, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-016-9492-y.

Heikkila:2017:MRF

[734] Ville T. Heikkilä, Maria Paasivaara, Casper Lasssenius, Daniela Damian,

and Christian Engblom. Managing the requirements flow from strategy to release in large-scale agile development: a case study at Ericsson. *Empirical Software Engineering*, 22(6): 2892–2936, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9491-z`; `http://link.springer.com/content/pdf/10.1007/s10664-016-9491-z.pdf`.

Alegroth:2017:LTU

[735] Emil Alégroth and Robert Feldt. On the long-term use of visual GUI testing in industrial practice: a case study. *Empirical Software Engineering*, 22(6): 2937–2971, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9497-6`; `http://link.springer.com/content/pdf/10.1007/s10664-016-9497-6.pdf`.

Assuncao:2017:RLA

[736] Wesley K. G. Assunção, Roberto E. Lopez-Herrejon, Lukas Linsbauer, Silvia R. Vergilio, and Alexander Egyed. Reengineering legacy applications into software product lines: a systematic mapping. *Empirical Software Engineering*, 22(6):2972–3016, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9499-z`.

Labunets:2017:MCS

[737] Katsiaryna Labunets, Fabio Massacci, Federica Paci, Sabrina Marczak, and Flávio Moreira de Oliveira. Model comprehension for security risk assessment: an empirical comparison of tabular vs. graphical representations. *Empirical Software Engineering*, 22(6): 3017–3056, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9502-8`.

Antinyan:2017:ECC

[738] Vard Antinyan, Mirosław Staron, and Anna Sandberg. Evaluating code complexity triggers, use of complexity measures and the influence of code complexity on maintenance time. *Empirical Software Engineering*, 22(6): 3057–3087, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9508-2`; `http://link.springer.com/content/pdf/10.1007/s10664-017-9508-2.pdf`.

Noei:2017:SRM

[739] Ehsan Noei, Mark D. Syer, Ying Zou, Ahmed E. Hassan, and Iman Keivanloo. A study of the relation of mobile device attributes with the user-perceived quality of Android apps. *Empirical Software Engineering*, 22(6): 3088–3116, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9507-3`.

Bezemer:2017:ESU

[740] Cor-Paul Bezemer, Shane McIntosh, Bram Adams, Daniel M. German, and Ahmed E. Hassan. An empirical study of unspecified dependencies

in make-based build systems. *Empirical Software Engineering*, 22(6): 3117–3148, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9510-8`.

Xia:2017:WDD

[741] Xin Xia, Lingfeng Bao, David Lo, Pavneet Singh Kochhar, Ahmed E. Hassan, and Zhenchang Xing. What do developers search for on the web? *Empirical Software Engineering*, 22(6): 3149–3185, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9514-4`.

Zhang:2017:DTC

[742] Feng Zhang, Iman Keivanloo, and Ying Zou. Data transformation in cross-project defect prediction. *Empirical Software Engineering*, 22(6): 3186–3218, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9516-2`.

Munaiah:2017:CGE

[743] Nuthan Munaiah, Steven Kroh, Craig Cabrey, and Meiyappan Nagappan. Curating GitHub for engineered software projects. *Empirical Software Engineering*, 22(6):3219–3253, December 2017. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9512-6`.

Li:2018:GAB

[744] Xuelin Li, W. Eric Wong, Ruizhi Gao, Linghuan Hu, and Shigeru Hosono. Genetic algorithm-based test generation for software product line with the integration of fault localization techniques. *Empirical Software Engineering*, 23 (1):1–51, February 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-016-9494-9`.

Scavuzzo:2018:ECB

[745] Marco Scavuzzo, Elisabetta Di Nitto, and Danilo Ardagna. Experiences and challenges in building a data intensive system for data migration. *Empirical Software Engineering*, 23 (1):52–86, February 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9503-7`.

Zhang:2018:SSB

[746] Huihui Zhang, Shuai Wang, Tao Yue, Shaukat Ali, and Chao Liu. Search and similarity based selection of use case scenarios: An empirical study. *Empirical Software Engineering*, 23 (1):87–164, February 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9500-x`.

Chari:2018:IIN

[747] Kaushal Chari and Manish Agrawal. Impact of incorrect and new requirements on waterfall software project outcomes. *Empirical Software Engineering*, 23(1):165–185, February

2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9506-4.

Munir:2018:OIU

[748] Hussan Munir, Johan Linåker, Krzysztof Wnuk, and Per Runeson. Open innovation using open source tools: a case study at Sony Mobile. *Empirical Software Engineering*, 23(1): 186–223, February 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9511-7; http://link.springer.com/content/pdf/10.1007/s10664-017-9511-7.pdf.

Ali:2018:ACS

[749] Nour Ali, Sean Baker, Ross O'Crowley, Sebastian Herold, and Jim Buckley. Architecture consistency: State of the practice, challenges and requirements. *Empirical Software Engineering*, 23(1):224–258, February 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9515-3; http://link.springer.com/content/pdf/10.1007/s10664-017-9515-3.pdf. See erratum [790].

Hadar:2018:PDS

[750] Irit Hadar, Tomer Hasson, Oshrat Ayalon, Eran Toch, Michael Birnhack, Sofia Sherman, and Arod Balissa. Privacy by designers: software developers' privacy mindset. *Empirical Software Engineering*, 23(1):259–289, February 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9517-1.

Kabinna:2018:ESL

[751] Suhas Kabinna, Cor-Paul Bezemer, Weiyi Shang, Mark D. Syer, and Ahmed E. Hassan. Examining the stability of logging statements. *Empirical Software Engineering*, 23(1): 290–333, February 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9518-0.

daCosta:2018:ESI

[752] Daniel Alencar da Costa, Shane McIntosh, Uirá Kulesza, Ahmed E. Hassan, and Surafel Lemma Abebe. An empirical study of the integration time of fixed issues. *Empirical Software Engineering*, 23(1):334–383, February 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9520-6.

Kula:2018:DDU

[753] Raula Gaikovina Kula, Daniel M. German, Ali Ouni, Takashi Ishio, and Katsuro Inoue. Do developers update their library dependencies? *Empirical Software Engineering*, 23(1): 384–417, February 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9521-5.

Huang:2018:ISA

[754] Qiao Huang, Emad Shihab, Xin Xia, David Lo, and Shanping Li. Identifying self-admitted technical debt in open source projects using text mining. *Empirical Software Engineering*, 23(1): 418–451, February 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9522-4`.

Falessi:2018:ESE

[755] Davide Falessi, Natalia Juristo, Claes Wohlin, Burak Turhan, Jürgen Münch, Andreas Jedlitschka, and Markku Oivo. Empirical software engineering experts on the use of students and professionals in experiments. *Empirical Software Engineering*, 23(1):452–489, February 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9523-3`.

Dingsoyr:2018:ESD

[756] Torgeir Dingsøyr, Nils Brede Moe, Tor Erlend Fægri, and Eva Amdahl Seim. Exploring software development at the very large-scale: a revelatory case study and research agenda for agile method adaptation. *Empirical Software Engineering*, 23(1): 490–520, February 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9524-2; http://link.springer.com/content/pdf/10.1007/s10664-017-9524-2.pdf`.

Murgia:2018:EQQ

[757] Alessandro Murgia, Marco Ortu, Parastou Tourani, Bram Adams, and Serge Demeyer. An exploratory qualitative and quantitative analysis of emotions in issue report comments of open source systems. *Empirical Software Engineering*, 23(1):521–564, February 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9526-0`.

Anonymous:2018:AES

[758] Anonymous. Appreciation to *Empirical Software Engineering* reviewers of 2017. *Empirical Software Engineering*, 23(2):565–569, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9598-5; http://link.springer.com/content/pdf/10.1007/s10664-018-9598-5.pdf`.

Roy:2018:TDC

[759] Arunava Roy and Hoang Pham. Toward the development of a conventional time series based web error forecasting framework. *Empirical Software Engineering*, 23(2):570–644, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9530-4`.

Soh:2018:NMI

[760] Zéphyrin Soh, Foutse Khomh, Yann-Gaël Guéhéneuc, and Giuliano Antoniol. Noise in Mylyn interaction traces and its impact on developers and

recommendation systems. *Empirical Software Engineering*, 23(2):645–692, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9529-x`.

Mondal:2018:CCR

[761] Manishankar Mondal, Md Saidur Rahman, Chanchal K. Roy, and Kevin A. Schneider. Is cloned code really stable? *Empirical Software Engineering*, 23(2):693–770, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9528-y`.

Lin:2018:ESE

[762] Dayi Lin, Cor-Paul Bezemer, and Ahmed E. Hassan. An empirical study of early access games on the Steam platform. *Empirical Software Engineering*, 23(2):771–799, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9531-3`.

Wang:2018:EET

[763] Shaowei Wang, David Lo, Bogdan Vasilescu, and Alexander Serebrenik. EnTagRec $^{++}$: An enhanced tag recommendation system for software information sites. *Empirical Software Engineering*, 23(2):800–832, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9533-1`.

Robbes:2018:GES

[764] Romain Robbes, Emily Hill, and Christian Bird. Guest editorial: Special section on mining software repositories. *Empirical Software Engineering*, 23(2):833–834, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9612-y; http://link.springer.com/content/pdf/10.1007/s10664-018-9612-y.pdf`.

daCosta:2018:IRR

[765] Daniel Alencar da Costa, Shane McIntosh, Christoph Treude, Uirá Kulesza, and Ahmed E. Hassan. The impact of rapid release cycles on the integration delay of fixed issues. *Empirical Software Engineering*, 23(2):835–904, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9548-7`.

Dintzner:2018:FAA

[766] Nicolas Dintzner, Arie van Deursen, and Martin Pinzger. FEVER: An approach to analyze feature-oriented changes and artefact co-evolution in highly configurable systems. *Empirical Software Engineering*, 23(2):905–952, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9557-6; http://link.springer.com/content/pdf/10.1007/s10664-017-9557-6.pdf`.

Zagalsky:2018:HRC

[767] Alexey Zagalsky, Daniel M. German,

Margaret-Anne Storey, Carlos Gómez Teshima, and Germán Poo-Caamaño. How the R community creates and curates knowledge: an extended study of Stack Overflow and mailing lists. *Empirical Software Engineering*, 23 (2):953–986, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9536-y`.

Rolfsnes:2018:AAR

[768] Thomas Rolfsnes, Leon Moonen, Stefano Di Alesio, Razieh Behjati, and Dave Binkley. Aggregating association rules to improve change recommendation. *Empirical Software Engineering*, 23(2):987–1035, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9560-y`.

Trautsch:2018:APR

[769] Fabian Trautsch, Steffen Herbold, Philip Makedonski, and Jens Grabowski. Addressing problems with replicability and validity of repository mining studies through a smart data platform. *Empirical Software Engineering*, 23(2):1036–1083, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9537-x`.

Xu:2018:DSC

[770] Bowen Xu, Zhenchang Xing, Xin Xia, David Lo, and Shanping Li. Domain-specific cross-language relevant question retrieval. *Empirical Software Engineering*, 23(2):1084–1122, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9568-3`.

Squire:2018:DSD

[771] Megan Squire. Data sets describing the circle of life in Ruby hosting, 2003–2016. *Empirical Software Engineering*, 23(2):1123–1152, April 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9581-6`.

Datta:2018:HDD

[772] Subhajit Datta. How does developer interaction relate to software quality? An examination of product development data. *Empirical Software Engineering*, 23(3):1153–1187, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9534-0`.

Palomba:2018:DIM

[773] Fabio Palomba, Gabriele Bavota, Massimiliano Di Penta, Fausto Fasano, Rocco Oliveto, and Andrea De Lucia. On the diffuseness and the impact on maintainability of code smells: a large scale empirical investigation. *Empirical Software Engineering*, 23 (3):1188–1221, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9535-z; http://link.springer.com/content/pdf/10.1007/s10664-017-9535-z.pdf`.

Narayanan:2018:MVC

[774] Annamalai Narayanan, Mahinthan Chandramohan, Lihui Chen, and Yang Liu. A multi-view context-aware approach to Android malware detection and malicious code localization. *Empirical Software Engineering*, 23 (3):1222–1274, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9539-8`.

Hassan:2018:SDB

[775] Safwat Hassan, Chakkrit Tantithamthavorn, Cor-Paul Bezemer, and Ahmed E. Hassan. Studying the dialogue between users and developers of free apps in the Google Play Store. *Empirical Software Engineering*, 23(3):1275–1312, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9538-9`.

Bao:2018:IDA

[776] Lingfeng Bao, Zhenchang Xing, Xin Xia, David Lo, and Ahmed E. Hassan. Inference of development activities from interaction with uninstrumented applications. *Empirical Software Engineering*, 23(3):1313–1351, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9547-8`.

Calefato:2018:SPD

[777] Fabio Calefato, Filippo Lanubile, Federico Maiorano, and Nicole Novielli. Sentiment polarity detection for software development. *Empirical Software Engineering*, 23(3):1352–1382, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9546-9`.

Morrison:2018:VDR

[778] Patrick J. Morrison, Rahul Pandita, Xusheng Xiao, Ram Chillarege, and Laurie Williams. Are vulnerabilities discovered and resolved like other defects? *Empirical Software Engineering*, 23(3):1383–1421, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9541-1`.

Chowdhury:2018:ESA

[779] Shaiful Chowdhury, Silvia Di Nardo, Abram Hindle, and Zhen Ming (Jack) Jiang. An exploratory study on assessing the energy impact of logging on Android applications. *Empirical Software Engineering*, 23(3):1422–1456, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9545-x`.

Tamburri:2018:GMS

[780] Damian A. Tamburri and Rick Kazman. General methods for software architecture recovery: a potential approach and its evaluation. *Empirical Software Engineering*, 23 (3):1457–1489, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9543-z`.

Arif:2018:ESD

[781] Muhammad Moiz Arif, Weiyi Shang, and Emad Shihab. Empirical study on the discrepancy between performance testing results from virtual and physical environments. *Empirical Software Engineering*, 23(3):1490–1518, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9553-x`.

Bagherzadeh:2018:ADL

[782] Mojtaba Bagherzadeh, Nafiseh Kahani, Cor-Paul Bezemer, Ahmed E. Hassan, Juergen Dingel, and James R. Cordy. Analyzing a decade of Linux system calls. *Empirical Software Engineering*, 23(3):1519–1551, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9551-z`.

Wang:2018:UFF

[783] Shaowei Wang, Tse-Hsun Chen, and Ahmed E. Hassan. Understanding the factors for fast answers in technical Q&A websites. *Empirical Software Engineering*, 23(3):1552–1593, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9558-5`.

Ribeiro:2018:CPS

[784] Talita Vieira Ribeiro, Jobson Massollar, and Guilherme Horta Travassos. Challenges and pitfalls on surveying evidence in the software engineering technical literature: an exploratory study with novices. *Empirical Software Engineering*, 23(3):1594–1663, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9556-7`.

Gupta:2018:RUI

[785] Monika Gupta, Allahbaksh Asadullah, Srinivas Padmanabhuni, and Alexander Serebrenik. Reducing user input requests to improve IT support ticket resolution process. *Empirical Software Engineering*, 23(3):1664–1703, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9532-2`.

ElMezouar:2018:TUB

[786] Mariam El Mezouar, Feng Zhang, and Ying Zou. Are tweets useful in the bug fixing process? An empirical study on Firefox and Chrome. *Empirical Software Engineering*, 23 (3):1704–1742, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9559-4`.

Ricca:2018:ISB

[787] Filippo Ricca, Marco Torchiano, Maurizio Leotta, Alessandro Tiso, Giovanna Guerrini, and Gianna Reggio. On the impact of state-based model-driven development on maintainability: a family of experiments using UniMod. *Empirical Software Engineering*, 23(3):1743–1790, June 2018. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9563-8.

Ajienka:2018:ESI

[788] Nemitari Ajienka, Andrea Capiluppi, and Steve Counsell. An empirical study on the interplay between semantic coupling and co-change of software classes. *Empirical Software Engineering*, 23 (3):1791–1825, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9569-2; http://link.springer.com/content/pdf/10.1007/s10664-017-9569-2.pdf.

Guo:2018:DEP

[789] Jianmei Guo, Dingyu Yang, Norbert Siegmund, Sven Apel, Atrisha Sarkar, Pavel Valov, Krzysztof Czarnecki, Andrzej Wasowski, and Huiqun Yu. Data-efficient performance learning for configurable systems. *Empirical Software Engineering*, 23(3):1826–1867, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9573-6.

Ali:2018:EAC

[790] Nour Ali, Sean Baker, Ross O'Crowley, Sebastian Herold, and Jim Buckley. Erratum to: Architecture consistency: State of the practice, challenges and requirements. *Empirical Software Engineering*, 23(3):1868–1869, June 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9542-0; http://link.springer.com/content/pdf/10.1007/s10664-017-9542-0.pdf. See [749].

Tsikerdekis:2018:PCC

[791] Michail Tsikerdekis. Persistent code contribution: a ranking algorithm for code contribution in crowdsourced software. *Empirical Software Engineering*, 23(4):1871–1894, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9575-4.

Kopec:2018:OAH

[792] Wiesław Kopeć, Bartłomiej Balcerzak, Radosław Nielek, Grzegorz Kowalik, Adam Wierzbicki, and Fabio Casati. Older adults and hackathons: a qualitative study. *Empirical Software Engineering*, 23(4):1895–1930, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9565-6; http://link.springer.com/content/pdf/10.1007/s10664-017-9565-6.pdf.

Borle:2018:AET

[793] Neil C. Borle, Meysam Feghhi, Eleni Stroulia, Russell Greiner, and Abram Hindle. Analyzing the effects of test driven development in GitHub. *Empirical Software Engineering*, 23(4): 1931–1958, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9576-3.

Arcuri:2018:ERA

[794] Andrea Arcuri. An experience report on applying software testing academic results in industry: we need usable automated test generation. *Empirical Software Engineering*, 23(4): 1959–1981, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9570-9`.

Madeyski:2018:EST

[795] Lech Madeyski and Barbara Kitchenham. Effect sizes and their variance for AB/BA crossover design studies. *Empirical Software Engineering*, 23(4): 1982–2017, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9574-5; http://link.springer.com/content/pdf/10.1007/s10664-017-9574-5.pdf`.

Przybylek:2018:ESI

[796] Adam Przybyłek. An empirical study on the impact of AspectJ on software evolvability. *Empirical Software Engineering*, 23(4):2018–2050, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9580-7; http://link.springer.com/content/pdf/10.1007/s10664-017-9580-7.pdf`.

Accioly:2018:USS

[797] Paola Accioly, Paulo Borba, and Guilherme Cavalcanti. Understanding semi-structured merge conflict characteristics in open-source Java projects. *Empirical Software Engineering*, 23(4): 2051–2085, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9586-1`.

Danglot:2018:CAS

[798] Benjamin Danglot, Philippe Preux, Benoit Baudry, and Martin Monperrus. Correctness attraction: a study of stability of software behavior under runtime perturbation. *Empirical Software Engineering*, 23(4):2086–2119, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9571-8`.

Anonymous:2018:ENSa

[799] Anonymous. Editor's note: Special issue on software maintenance and evolution. *Empirical Software Engineering*, 23(4):2120, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9631-8; http://link.springer.com/content/pdf/10.1007/s10664-018-9631-8.pdf`.

Aniche:2018:CSM

[800] Maurício Aniche, Gabriele Bavota, Christoph Treude, Marco Aurélio Gerosa, and Arie van Deursen. Code smells for model–view-controller architectures. *Empirical Software Engineering*, 23(4):2121–2157, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9540-2; http://link.springer.`

com/content/pdf/10.1007/s10664-017-9540-2.pdf.

Sawant:2018:RDC

[801] Anand Ashok Sawant, Romain Robbes, and Alberto Bacchelli. On the reaction to deprecation of clients of 4 + 1 popular Java APIs and the JDK. *Empirical Software Engineering*, 23(4): 2158–2197, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9554-9; http://link.springer.com/content/pdf/10.1007/s10664-017-9554-9.pdf.

Rahimi:2018:EST

[802] Mona Rahimi and Jane Cleland-Huang. Evolving software trace links between requirements and source code. *Empirical Software Engineering*, 23(4): 2198–2231, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9561-x.

Saini:2018:CNC

[803] Vaibhav Saini, Hitesh Sajnani, and Cristina Lopes. Cloned and non-cloned Java methods: a comparative study. *Empirical Software Engineering*, 23(4): 2232–2278, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9572-7.

Zhang:2018:FMA

[804] Yun Zhang, David Lo, Xin Xia, Giuseppe Scanniello, Tien-Duy B. Le, and Jianling Sun. Fusing multi-abstraction vector space models for concern localization. *Empirical Software Engineering*, 23(4):2279–2322, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9585-2.

Washizaki:2018:PTP

[805] Hironori Washizaki, Yann-Gaël Guéhéneuc, and Foutse Khomh. ProMeTA: a taxonomy for program metamodels in program reverse engineering. *Empirical Software Engineering*, 23(4): 2323–2358, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9592-3; http://link.springer.com/content/pdf/10.1007/s10664-017-9592-3.pdf.

Bavota:2018:ISI

[806] Gabriele Bavota and Michaela Greiler. Introduction to the special issue on source code analysis and manipulation. *Empirical Software Engineering*, 23(4): 2359–2361, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9610-0; http://link.springer.com/content/pdf/10.1007/s10664-018-9610-0.pdf.

Moonen:2018:WEH

[807] Leon Moonen, Thomas Rolfsnes, Dave Binkley, and Stefano Di Alesio. What are the effects of history length and age on mining software change impact? *Empirical Software Engineering*, 23(4): 2362–2397, August 2018. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9588-z.

Binkley:2018:NSS

[808] Dave Binkley, Dawn Lawrie, and Christopher Morrell. The need for software specific natural language techniques. *Empirical Software Engineering*, 23(4):2398–2425, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9566-5.

Kintis:2018:HEM

[809] Marinos Kintis, Mike Papadakis, Andreas Papadopoulos, Evangelos Valvis, Nicos Malevris, and Yves Le Traon. How effective are mutation testing tools? An empirical analysis of Java mutation testing tools with manual analysis and real faults. *Empirical Software Engineering*, 23(4):2426–2463, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9582-5.

Ragkhitwetsagul:2018:CCS

[810] Chaiyong Ragkhitwetsagul, Jens Krinke, and David Clark. A comparison of code similarity analysers. *Empirical Software Engineering*, 23(4):2464–2519, August 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9564-7; http://link.springer.com/content/pdf/10.1007/s10664-017-9564-7.pdf.

Zhong:2018:TRH

[811] Hao Zhong and Na Meng. Towards reusing hints from past fixes. *Empirical Software Engineering*, 23(5):2521–2549, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9584-3.

Paasivaara:2018:LSA

[812] Maria Paasivaara, Benjamin Behm, Casper Lassenius, and Minna Hallikainen. Large-scale agile transformation at Ericsson: a case study. *Empirical Software Engineering*, 23(5):2550–2596, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9555-8; http://link.springer.com/content/pdf/10.1007/s10664-017-9555-8.pdf.

Rakha:2018:RPA

[813] Mohamed Sami Rakha, Cor-Paul Bezemer, and Ahmed E. Hassan. Revisiting the performance of automated approaches for the retrieval of duplicate reports in issue tracking systems that perform just-in-time duplicate retrieval. *Empirical Software Engineering*, 23(5):2597–2621, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-017-9590-5.

Sirres:2018:ASU

[814] Raphael Sirres, Tegawendé F. Bissyandé, Dongsun Kim, David Lo, Jacques Klein, Kisub Kim, and Yves

Le Traon. Augmenting and structuring user queries to support efficient free-form code search. *Empirical Software Engineering*, 23(5):2622–2654, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9544-y`.

Li:2018:SSL

[815] Heng Li, Tse-Hsun (Peter) Chen, Weiyi Shang, and Ahmed E. Hassan. Studying software logging using topic models. *Empirical Software Engineering*, 23 (5):2655–2694, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9595-8`.

Scanniello:2018:DSM

[816] Giuseppe Scanniello, Carmine Gravino, Marcela Genero, José A. Cruz-Lemus, Genoveffa Tortora, Michele Risi, and Gabriella Dodero. Do software models based on the UML aid in source-code comprehensibility? Aggregating evidence from 12 controlled experiments. *Empirical Software Engineering*, 23(5): 2695–2733, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9591-4`.

Kosar:2018:PCD

[817] Tomaž Kosar, Sašo Gaberc, Jeffrey C. Carver, and Marjan Mernik. Program comprehension of domain-specific and general-purpose languages: replication of a family of experiments using integrated development environments. *Empirical Software Engineering*, 23(5): 2734–2763, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9593-2`.

Nayebi:2018:ASM

[818] Maleknaz Nayebi, Henry Cho, and Guenther Ruhe. App store mining is not enough for app improvement. *Empirical Software Engineering*, 23(5): 2764–2794, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9601-1`.

Hannebauer:2018:DSH

[819] Christoph Hannebauer, Marc Hesenius, and Volker Gruhn. Does syntax highlighting help programming novices? *Empirical Software Engineering*, 23(5): 2795–2828, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9579-0`.

Saborido:2018:GMM

[820] Rubén Saborido, Rodrigo Morales, Foutse Khomh, Yann-Gaël Guéhéneuc, and Giuliano Antoniol. Getting the most from map data structures in Android. *Empirical Software Engineering*, 23(5):2829–2864, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9607-8`.

Anonymous:2018:ENSb

[821] Anonymous. Editor's note: Special issue on automatic software repair. *Empirical Software Engineering*, 23(5):2865, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9632-7; http://link.springer.com/content/pdf/10.1007/s10664-018-9632-7.pdf`.

Wu:2018:CLC

[822] Rongxin Wu, Ming Wen, Shing-Chi Cheung, and Hongyu Zhang. ChangeLocator: locate crash-inducing changes based on crash reports. *Empirical Software Engineering*, 23(5):2866–2900, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9567-4`.

Motwani:2018:DAP

[823] Manish Motwani, Sandhya Sankaranarayanan, René Just, and Yuriy Brun. Do automated program repair techniques repair hard and important bugs? *Empirical Software Engineering*, 23(5):2901–2947, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9550-0`.

Yi:2018:CSB

[824] Jooyong Yi, Shin Hwei Tan, Sergey Mechtaev, Marcel Böhme, and Abhik Roychoudhury. A correlation study between automated program repair and test-suite metrics. *Empirical Software Engineering*, 23(5):2948–2979, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9552-y`.

Oliveira:2018:IRG

[825] Vinicius Paulo L. Oliveira, Eduardo Faria de Souza, Claire Le Goues, and Celso G. Camilo-Junior. Improved representation and genetic operators for linear genetic programming for automated program repair. *Empirical Software Engineering*, 23(5):2980–3006, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9562-9`.

Le:2018:OSB

[826] Xuan Bach D. Le, Ferdian Thung, David Lo, and Claire Le Goues. Overfitting in semantics-based automated program repair. *Empirical Software Engineering*, 23(5):3007–3033, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9577-2`.

Yu:2018:PRP

[827] Tingting Yu and Michael Pradel. Pinpointing and repairing performance bottlenecks in concurrent programs. *Empirical Software Engineering*, 23(5):3034–3071, October 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9578-1`.

Ayala:2018:SRO

[828] Claudia Ayala, Anh Nguyen-Duc, Xavier Franch, Martin Höst, Reidar Conradi, Daniela Cruzes, and Muhammad Ali Babar. System requirements–OSS components: matching and mismatch resolution practices — an empirical study. *Empirical Software Engineering*, 23(6):3073–3128, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9594-1`.

Ye:2018:AAR

[829] Deheng Ye, Lingfeng Bao, Zhenchang Xing, and Shang-Wei Lin. APIReal: an API recognition and linking approach for online developer forums. *Empirical Software Engineering*, 23(6): 3129–3160, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9608-7`.

Yu:2018:FBA

[830] Zhe Yu, Nicholas A. Kraft, and Tim Menzies. Finding better active learners for faster literature reviews. *Empirical Software Engineering*, 23(6): 3161–3186, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9587-0`.

Kuchta:2018:CED

[831] Tomasz Kuchta, Thibaud Lutellier, Edmund Wong, Lin Tan, and Cristian Cadar. On the correctness of electronic documents: studying, finding, and localizing inconsistency bugs in PDF readers and files. *Empirical Software Engineering*, 23(6):3187–3220, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9600-2; http://link.springer.com/content/pdf/10.1007/s10664-018-9600-2.pdf`.

Pinto:2018:COS

[832] Gustavo Pinto, Igor Steinmacher, Luiz Felipe Dias, and Marco Gerosa. On the challenges of open-sourcing proprietary software projects. *Empirical Software Engineering*, 23(6): 3221–3247, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9609-6`.

Hassani:2018:SDL

[833] Mehran Hassani, Weiyi Shang, Emad Shihab, and Nikolaos Tsantalis. Studying and detecting log-related issues. *Empirical Software Engineering*, 23(6): 3248–3280, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9603-z`.

Fernandez-Saez:2018:ICS

[834] Ana M. Fernández-Sáez, Michel R. V. Chaudron, and Marcela Genero. An industrial case study on the use of UML in software maintenance and its perceived benefits and hurdles. *Empirical Software Engineering*, 23(6): 3281–3345, December 2018. CODEN

ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9599-4.

Fan:2018:EPM

[835] Yuanrui Fan, Xin Xia, David Lo, and Shanping Li. Early prediction of merged code changes to prioritize reviewing tasks. *Empirical Software Engineering*, 23(6):3346–3393, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9602-0.

Bernardi:2018:SAP

[836] Simona Bernardi, Juan L. Domínguez, Abel Gómez, Christophe Joubert, José Merseguer, Diego Perez-Palacin, José I. Requeno, and Alberto Romeu. A systematic approach for performance assessment using process mining. *Empirical Software Engineering*, 23(6):3394–3441, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9606-9.

Hu:2018:SCS

[837] Hanyang Hu, Cor-Paul Bezemer, and Ahmed E. Hassan. Studying the consistency of star ratings and the complaints in 1 & 2-star user reviews for top free cross-platform Android and iOS apps. *Empirical Software Engineering*, 23(6):3442–3475, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9604-y.

Mujahid:2018:ESA

[838] Suhaib Mujahid, Giancarlo Sierra, Rabe Abdalkareem, Emad Shihab, and Weiyi Shang. An empirical study of Android Wear user complaints. *Empirical Software Engineering*, 23(6):3476–3502, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9615-8.

Pano:2018:FAL

[839] Amantia Pano, Daniel Graziotin, and Pekka Abrahamsson. Factors and actors leading to the adoption of a JavaScript framework. *Empirical Software Engineering*, 23(6):3503–3534, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9613-x.

Laukkanen:2018:CRE

[840] Eero Laukkanen, Maria Paasivaara, Juha Itkonen, and Casper Lassenius. Comparison of release engineering practices in a large mature company and a startup. *Empirical Software Engineering*, 23(6):3535–3577, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9616-7; http://link.springer.com/content/pdf/10.1007/s10664-018-9616-7.pdf.

Stevanetic:2018:SAA

[841] Srdjan Stevanetic and Uwe Zdun. Supporting the analyzability of architectural component models — empiri-

cal findings and tool support. *Empirical Software Engineering*, 23(6): 3578–3625, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9583-4`.

Grunbacher:2018:FSI

[842] Paul Grünbacher and Anna Perini. Foreword to the special issue on empirical research in requirements engineering. *Empirical Software Engineering*, 23(6):3626–3629, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9624-7; http://link.springer.com/content/pdf/10.1007/s10664-018-9624-7.pdf`.

Quirchmayr:2018:SAR

[843] Thomas Quirchmayr, Barbara Paech, Roland Kohl, Hannes Karey, and Gunar Kasdepke. Semi-automatic rule-based domain terminology and software feature-relevant information extraction from natural language user manuals. *Empirical Software Engineering*, 23(6):3630–3683, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9597-6`.

Ferrari:2018:DRD

[844] Alessio Ferrari, Gloria Gori, Benedetta Rosadini, Iacopo Trotta, Stefano Bacherini, Alessandro Fantechi, and Stefania Gnesi. Detecting requirements defects with NLP patterns: an industrial experience in the railway domain. *Empirical Software Engineering*, 23(6): 3684–3733, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9596-7`.

Jha:2018:UFS

[845] Nishant Jha and Anas Mahmoud. Using frame semantics for classifying and summarizing application store reviews. *Empirical Software Engineering*, 23(6): 3734–3767, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9605-x`.

Hu:2018:UHE

[846] Wenhua Hu, Jeffrey C. Carver, Vaibhav Anu, Gursimran S. Walia, and Gary L. Bradshaw. Using human error information for error prevention. *Empirical Software Engineering*, 23(6): 3768–3800, December 2018. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9623-8`.

Feldt:2018:FCU

[847] Robert Feldt, Thomas Zimmermann, Gunnar R. Bergersen, Davide Falessi, Andreas Jedlitschka, Natalia Juristo, Jürgen Münch, Markku Oivo, Per Runeson, Martin Shepperd, Dag I. K. Sjøberg, and Burak Turhan. Four commentaries on the use of students and professionals in empirical software engineering experiments. *Empirical Software Engineering*, 23(6): 3801–3820, December 2018. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9655-0; http://link.springer.com/content/pdf/10.1007/s10664-018-9655-0.pdf.

Anonymous:2019:AES

[848] Anonymous. Appreciation to *Empirical Software Engineering* Reviewers of 2018. *Empirical Software Engineering*, 24(1):1–6, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09680-2; http://link.springer.com/content/pdf/10.1007/s10664-019-09680-2.pdf.

Hu:2019:SCS

[849] Hanyang Hu, Shaowei Wang, Cor-Paul Bezemer, and Ahmed E. Hassan. Studying the consistency of star ratings and reviews of popular free hybrid Android and iOS apps. *Empirical Software Engineering*, 24(1):7–32, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9617-6.

Yu:2019:APO

[850] Zhongxing Yu, Matias Martinez, Benjamin Danglot, Thomas Durieux, and Martin Monperrus. Alleviating patch overfitting with automatic test generation: a study of feasibility and effectiveness for the Nopol repair system. *Empirical Software Engineering*, 24(1):33–67, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9619-4.

Klotins:2019:SES

[851] Eriks Klotins, Michael Unterkalmsteiner, and Tony Gorschek. Software engineering in start-up companies: An analysis of 88 experience reports. *Empirical Software Engineering*, 24(1):68–102, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9620-y; http://link.springer.com/content/pdf/10.1007/s10664-018-9620-y.pdf.

Nielebock:2019:PDF

[852] Sebastian Nielebock, Robert Heumüller, and Frank Ortmeier. Programmers do not favor lambda expressions for concurrent object-oriented code. *Empirical Software Engineering*, 24(1):103–138, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9622-9.

Al-Zubidy:2019:IPS

[853] Ahmed Al-Zubidy and Jeffrey C. Carver. Identification and prioritization of SLR search tool requirements: an SLR and a survey. *Empirical Software Engineering*, 24(1):139–169, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9626-5.

Lin:2019:ESG

[854] Dayi Lin, Cor-Paul Bezemer, Ying Zou, and Ahmed E. Hassan. An empirical study of game reviews on the steam platform. *Empirical Software*

Engineering, 24(1):170–207, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9627-4.

Lo:2019:PSI

[855] David Lo and Alexander Serebrenik. Preface to the special issue on program comprehension. *Empirical Software Engineering*, 24(1):208–210, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9662-1; http://link.springer.com/content/pdf/10.1007/s10664-018-9662-1.pdf.

Almeida:2019:IWH

[856] Daniel A. Almeida, Gail C. Murphy, Greg Wilson, and Michael Hoye. Investigating whether and how software developers understand open source software licensing. *Empirical Software Engineering*, 24(1):211–239, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9614-9.

Ceccato:2019:UBH

[857] Mariano Ceccato, Paolo Tonella, Cataldo Basile, Paolo Falcarin, Marco Torchiano, Bart Coppens, and Bjorn De Sutter. Understanding the behaviour of hackers while performing attack tasks in a professional setting and in a public challenge. *Empirical Software Engineering*, 24(1):240–286, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9625-6.

Ajami:2019:SPI

[858] Shulamyt Ajami, Yonatan Woodbridge, and Dror G. Feitelson. Syntax, predicates, idioms— what really affects code complexity? *Empirical Software Engineering*, 24(1):287–328, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9628-3.

Bavota:2019:ISI

[859] Gabriele Bavota and Andrian Marcus. Introduction to the special issue on software analysis, evolution, and reengineering. *Empirical Software Engineering*, 24(1):329–331, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9678-6; http://link.springer.com/content/pdf/10.1007/s10664-018-9678-6.pdf.

Alexandru:2019:RFA

[860] Carol V. Alexandru, Sebastiano Panichella, Sebastian Proksch, and Harald C. Gall. Redundancy-free analysis of multi-revision software artifacts. *Empirical Software Engineering*, 24(1):332–380, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9630-9.

Decan:2019:ECD

[861] Alexandre Decan, Tom Mens, and Philippe Grosjean. An empirical comparison of dependency network evolution in seven software packaging ecosystems. *Empirical Software Engineering*, 24(1):381–416, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-017-9589-y`.

Hofmeister:2019:SIN

[862] Johannes C. Hofmeister, Janet Siegmund, and Daniel V. Holt. Shorter identifier names take longer to comprehend. *Empirical Software Engineering*, 24(1):417–443, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9621-x`.

Liu:2019:EFL

[863] Bing Liu, Shiva Nejati, Lucia, and Lionel C. Briand. Effective fault localization of automotive Simulink models: achieving the trade-off between test oracle effort and fault localization accuracy. *Empirical Software Engineering*, 24(1):444–490, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9611-z`.

Stevens:2019:QDC

[864] Reinout Stevens, Tim Molderez, and Coen De Roover. Querying distilled code changes to extract executable transformations. *Empirical Software Engineering*, 24(1):491–535, February 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9644-3`.

Gao:2019:SCR

[865] Ruizhi Gao, Yabin Wang, Yang Feng, Zhenyu Chen, and W. Eric Wong. Successes, challenges, and rethinking — an industrial investigation on crowdsourced mobile application testing. *Empirical Software Engineering*, 24(2):537–561, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9618-5`.

McIntosh:2019:WCA

[866] Andrea McIntosh, Safwat Hassan, and Abram Hindle. What can Android mobile app developers do about the energy consumption of machine learning? *Empirical Software Engineering*, 24(2):562–601, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9629-2`.

Bennin:2019:RVD

[867] Kwabena Ebo Bennin, Jacky W. Keung, and Akito Monden. On the relative value of data resampling approaches for software defect prediction. *Empirical Software Engineering*, 24(2):602–636, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9633-6`.

Wu:2019:HDD

[868] Yuhao Wu, Shaowei Wang, Cor-Paul Bezemer, and Katsuro Inoue. How do developers utilize source code from Stack Overflow? *Empirical Software Engineering*, 24(2):637–673, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9634-5`.

Halin:2019:TTA

[869] Axel Halin, Alexandre Nuttinck, Mathieu Acher, Xavier Devroey, Gilles Perrouin, and Benoit Baudry. Test them all, is it worth it? Assessing configuration sampling on the JHipster Web development stack. *Empirical Software Engineering*, 24(2):674–717, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9635-4; http://link.springer.com/content/pdf/10.1007/s10664-018-9635-4.pdf`.

Huang:2019:ESI

[870] Yonghui Huang, Daniel Alencar da Costa, Feng Zhang, and Ying Zou. An empirical study on the issue reports with questions raised during the issue resolving process. *Empirical Software Engineering*, 24(2):718–750, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9636-3`.

Malloy:2019:EAT

[871] Brian A. Malloy and James F. Power. An empirical analysis of the transition from Python 2 to Python 3. *Empirical Software Engineering*, 24(2):751–778, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9637-2`.

Mori:2019:BTB

[872] Toshiki Mori and Naoshi Uchihira. Balancing the trade-off between accuracy and interpretability in software defect prediction. *Empirical Software Engineering*, 24(2):779–825, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9638-1`.

Rahman:2019:MFT

[873] Md Tajmilur Rahman, Peter C. Rigby, and Emad Shihab. The modular and feature toggle architectures of Google Chrome. *Empirical Software Engineering*, 24(2):826–853, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9639-0`.

Calefato:2019:EAB

[874] Fabio Calefato, Filippo Lanubile, and Nicole Novielli. An empirical assessment of best-answer prediction models in technical Q&A sites. *Empirical Software Engineering*, 24(2):854–901, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9642-5`.

Hindle:2019:PDB

[875] Abram Hindle and Curtis Onuczko. Preventing duplicate bug reports by continuously querying bug reports. *Empirical Software Engineering*, 24 (2):902–936, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9643-4`.

Thongtanunam:2019:WCS

[876] Patanamon Thongtanunam, Weiyi Shang, and Ahmed E. Hassan. Will this clone be short-lived? Towards a better understanding of the characteristics of short-lived clones. *Empirical Software Engineering*, 24(2):937–972, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9645-2`.

Ruangwan:2019:IHF

[877] Shade Ruangwan, Patanamon Thongtanunam, Akinori Ihara, and Kenichi Matsumoto. The impact of human factors on the participation decision of reviewers in modern code review. *Empirical Software Engineering*, 24 (2):973–1016, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9646-1`.

Malgonde:2019:EBM

[878] Onkar Malgonde and Kaushal Chari. An ensemble-based model for predicting agile software development effort. *Empirical Software Engineering*, 24 (2):1017–1055, April 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9647-0`.

Fernandez:2019:OSI

[879] Daniel Méndez Fernández, Martin Monperrus, Robert Feldt, and Thomas Zimmermann. The open science initiative of the *Empirical Software Engineering* journal. *Empirical Software Engineering*, 24(3):1057–1060, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09712-x; http://link.springer.com/content/pdf/10.1007/s10664-019-09712-x.pdf`.

Shahin:2019:ESA

[880] Mojtaba Shahin, Mansooreh Zahedi, Muhammad Ali Babar, and Liming Zhu. An empirical study of architecting for continuous delivery and deployment. *Empirical Software Engineering*, 24(3):1061–1108, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9651-4`.

McChesney:2019:ETA

[881] Ian McChesney and Raymond Bond. Eye tracking analysis of computer program comprehension in programmers with dyslexia. *Empirical Software Engineering*, 24(3):1109–1154, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9649-y; http://link.springer.`

com/content/pdf/10.1007/s10664-018-9649-y.pdf.

Chen:2019:WSP

[882] Chunyang Chen, Zhenchang Xing, and Yang Liu. What's Spain's Paris? Mining analogical libraries from Q&A discussions. *Empirical Software Engineering*, 24(3):1155–1194, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9657-y.

Vera-Perez:2019:CSP

[883] Oscar Luis Vera-Pérez, Benjamin Danglot, Martin Monperrus, and Benoit Baudry. A comprehensive study of pseudo-tested methods. *Empirical Software Engineering*, 24(3):1195–1225, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9653-2.

Santos:2019:CIU

[884] Alcemir Rodrigues Santos, Ivan do Carmo Machado, Eduardo Santana de Almeida, Janet Siegmund, and Sven Apel. Comparing the influence of using feature-oriented programming and conditional compilation on comprehending feature-oriented software. *Empirical Software Engineering*, 24(3):1226–1258, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9658-x.

Baltes:2019:UAS

[885] Sebastian Baltes and Stephan Diehl. Usage and attribution of Stack Overflow code snippets in GitHub projects. *Empirical Software Engineering*, 24(3):1259–1295, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9650-5.

Prana:2019:CCG

[886] Gede Artha Azriadi Prana, Christoph Treude, Ferdian Thung, Thushari Atapattu, and David Lo. Categorizing the content of GitHub README files. *Empirical Software Engineering*, 24(3):1296–1327, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9660-3.

Vale:2019:EIR

[887] Tassio Vale and Eduardo Santana de Almeida. Experimenting with information retrieval methods in the recovery of feature-code SPL traces. *Empirical Software Engineering*, 24(3):1328–1368, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9652-3.

Tamburri:2019:DCP

[888] Damian A. Tamburri, Fabio Palomba, Alexander Serebrenik, and Andy Zaidman. Discovering community patterns in open-source: a systematic approach and its evaluation. *Empirical Software Engineering*, 24(3):

1369–1417, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9659-9; http://link.springer.com/content/pdf/10.1007/s10664-018-9659-9.pdf.

Nielebock:2019:CSC

[889] Sebastian Nielebock, Dariusz Krolikowski, Jacob Krüger, Thomas Leich, and Frank Ortmeier. Commenting source code: is it worth it for small programming tasks? *Empirical Software Engineering*, 24(3):1418–1457, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9664-z.

Tan:2019:GES

[890] Lin Tan and Abram Hindle. Guest editorial: Special section on mining software repositories. *Empirical Software Engineering*, 24(3):1458–1460, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09724-7; http://link.springer.com/content/pdf/10.1007/s10664-019-09724-7.pdf.

Spadini:2019:MOT

[891] Davide Spadini, Maurício Aniche, Magiel Bruntink, and Alberto Bacchelli. Mock objects for testing Java systems. *Empirical Software Engineering*, 24(3):1461–1498, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9663-0; http://link.springer.com/content/pdf/10.1007/s10664-018-9663-0.pdf.

Pascarella:2019:CCC

[892] Luca Pascarella, Magiel Bruntink, and Alberto Bacchelli. Classifying code comments in Java software systems. *Empirical Software Engineering*, 24(3):1499–1537, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09694-w; http://link.springer.com/content/pdf/10.1007/s10664-019-09694-w.pdf.

Gharehyazie:2019:CPC

[893] Mohammad Gharehyazie, Baishakhi Ray, Mehdi Keshani, Masoumeh Soleimani Zavosht, Abbas Heydarnoori, and Vladimir Filkov. Cross-project code clones in GitHub. *Empirical Software Engineering*, 24(3):1538–1573, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9648-z.

Mengerink:2019:EOR

[894] Josh G. M. Mengerink, Jeroen Noten, and Alexander Serebrenik. Empowering OCL research: a large-scale corpus of open-source data from GitHub. *Empirical Software Engineering*, 24(3):1574–1609, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9641-6; http://link.springer.com/content/pdf/10.1007/s10664-018-9641-6.pdf.

Blincoe:2019:HLS

[895] Kelly Blincoe, Ali Dehghan, Abdoul-Djawadou Salaou, Adam Neal, Johan Linaker, and Daniela Damian. High-level software requirements and iteration changes: a predictive model. *Empirical Software Engineering*, 24 (3):1610–1648, June 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9656-z`.

Chowdhury:2019:GTS

[896] Shaiful Chowdhury, Stephanie Borle, Stephen Romansky, and Abram Hindle. GreenScaler: training software energy models with automatic test generation. *Empirical Software Engineering*, 24(4):1649–1692, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9640-7`.

Medeiros:2019:IMC

[897] Flávio Medeiros, Gabriel Lima, Guilherme Amaral, Sven Apel, Christian Kästner, Márcio Ribeiro, and Rohit Gheyi. An investigation of misunderstanding code patterns in C open-source software projects. *Empirical Software Engineering*, 24(4): 1693–1726, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9666-x`.

Salman:2019:CET

[898] Iflaah Salman, Burak Turhan, and Sira Vegas. A controlled experiment on time pressure and confirmation bias in functional software testing. *Empirical Software Engineering*, 24(4): 1727–1761, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9668-8; http://link.springer.com/content/pdf/10.1007/s10664-018-9668-8.pdf`.

Baum:2019:AWM

[899] Tobias Baum, Kurt Schneider, and Alberto Bacchelli. Associating working memory capacity and code change ordering with code review performance. *Empirical Software Engineering*, 24(4): 1762–1798, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9676-8`.

An:2019:ESD

[900] Le An, Marco Castelluccio, and Foutse Khomh. An empirical study of DLL injection bugs in the Firefox ecosystem. *Empirical Software Engineering*, 24(4): 1799–1822, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-018-9677-7`.

Casalnuovo:2019:SDB

[901] Casey Casalnuovo, Kenji Sagae, and Prem Devanbu. Studying the difference between natural and programming language corpora. *Empirical Software Engineering*, 24(4):1823–1868, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.`

com/article/10.1007/s10664-018-9669-7.

Rahman:2019:AQR

[902] Mohammad M. Rahman, Chanchal K. Roy, and David Lo. Automatic query reformulation for code search using crowdsourced knowledge. *Empirical Software Engineering*, 24(4): 1869–1924, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9671-0.

Kondo:2019:IFR

[903] Masanari Kondo, Cor-Paul Bezemer, Yasutaka Kamei, Ahmed E. Hassan, and Osamu Mizuno. The impact of feature reduction techniques on defect prediction models. *Empirical Software Engineering*, 24(4):1925–1963, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9679-5.

Noei:2019:TPU

[904] Ehsan Noei, Feng Zhang, Shaohua Wang, and Ying Zou. Towards prioritizing user-related issue reports of mobile applications. *Empirical Software Engineering*, 24(4):1964–1996, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09684-y.

May:2019:GDP

[905] Anna May, Johannes Wachs, and Anikó Hannák. Gender differences in participation and reward on Stack Overflow. *Empirical Software Engineering*, 24(4):1997–2019, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09685-x; http://link.springer.com/content/pdf/10.1007/s10664-019-09685-x.pdf.

binAli:2019:SIR

[906] Nauman bin Ali, Emelie Engström, Masoumeh Taromirad, Mohammad Reza Mousavi, Nasir Mehmood Minhas, Daniel Helgesson, Sebastian Kunze, and Mahsa Varshosaz. On the search for industry-relevant regression testing research. *Empirical Software Engineering*, 24(4):2020–2055, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9670-1; http://link.springer.com/content/pdf/10.1007/s10664-018-9670-1.pdf.

Mazuera-Rozo:2019:ASV

[907] Alejandro Mazuera-Rozo, Jairo Bautista-Mora, Mario Linares-Vásquez, Sandra Rueda, and Gabriele Bavota. The Android OS stack and its vulnerabilities: an empirical study. *Empirical Software Engineering*, 24(4): 2056–2101, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09689-7.

Ghaleb:2019:ESL

[908] Taher Ahmed Ghaleb, Daniel Alencar da Costa, and Ying Zou. An em-

pirical study of the long duration of continuous integration builds. *Empirical Software Engineering*, 24(4): 2102–2139, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09695-9`.

Zhao:2019:IPR

[909] Guoliang Zhao, Daniel Alencar da Costa, and Ying Zou. Improving the pull requests review process using learning-to-rank algorithms. *Empirical Software Engineering*, 24(4):2140–2170, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09696-8`.

Yan:2019:CIR

[910] Meng Yan, Xin Xia, David Lo, Ahmed E. Hassan, and Shanping Li. Characterizing and identifying reverted commits. *Empirical Software Engineering*, 24(4):2171–2208, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09688-8`.

Cruz:2019:CEP

[911] Luis Cruz and Rui Abreu. Catalog of energy patterns for mobile applications. *Empirical Software Engineering*, 24(4):2209–2235, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09682-0`.

Ragkhitwetsagul:2019:SSI

[912] Chaiyong Ragkhitwetsagul and Jens Krinke. Siamese: scalable and incremental code clone search via multiple code representations. *Empirical Software Engineering*, 24(4):2236–2284, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09697-7`.

Chen:2019:ESL

[913] Boyuan Chen and Zhen Ming (Jack) Jiang. Extracting and studying the logging–code-issue-introducing changes in Java-based large-scale open source software systems. *Empirical Software Engineering*, 24(4):2285–2322, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09690-0`.

Li:2019:AOP

[914] Yangguang Li and Zhen Ming (Jack) Jiang. Assessing and optimizing the performance impact of the just-in-time configuration parameters — a case study on PyPy. *Empirical Software Engineering*, 24(4):2323–2363, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09691-z`.

Bjarnason:2019:IRT

[915] Elizabeth Bjarnason, Helen Sharp, and Björn Regnell. Improving requirements-test alignment by prescribing practices that mitigate com-

munication gaps. *Empirical Software Engineering*, 24(4):2364–2409, August 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09698-6; http://link.springer.com/content/pdf/10.1007/s10664-019-09698-6.pdf.

Anonymous:2019:ENSa

[916] Anonymous. Editor's note: Special section on software maintenance and evolution. *Empirical Software Engineering*, 24(5):2821–2822, October 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09740-7.

Huang:2019:RSU

[917] Qiao Huang, Xin Xia, and David Lo. Revisiting supervised and unsupervised models for effort-aware just-in-time defect prediction. *Empirical Software Engineering*, 24(5):2823–2862, October 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9661-2.

Nelson:2019:LCM

[918] Nicholas Nelson, Caius Brindescu, Shane McKee, Anita Sarma, and Danny Dig. The life-cycle of merge conflicts: processes, barriers, and strategies. *Empirical Software Engineering*, 24(5):2863–2906, October 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9674-x.

Palomba:2019:SFR

[919] Fabio Palomba and Andy Zaidman. The smell of fear: on the relation between test smells and flaky tests. *Empirical Software Engineering*, 24(5):2907–2946, October 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09683-z. See retraction notice [1025].

Chaparro:2019:UBD

[920] Oscar Chaparro, Juan Manuel Florez, and Andrian Marcus. Using bug descriptions to reformulate queries during text-retrieval-based bug localization. *Empirical Software Engineering*, 24(5):2947–3007, October 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9672-z.

Castelluccio:2019:ESP

[921] Marco Castelluccio, Le An, and Foutse Khomh. An empirical study of patch uplift in rapid release development pipelines. *Empirical Software Engineering*, 24(5):3008–3044, October 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9665-y.

Anonymous:2019:ENSb

[922] Anonymous. Editor's note: Special section on source code analysis and manipulation. *Empirical Software Engineering*, 24(5):3045, October 2019. CODEN

ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09745-2; http://link.springer.com/content/pdf/10.1007/s10664-019-09745-2.pdf.

Gadient:2019:SCS

[923] Pascal Gadient, Mohammad Ghafari, Patrick Frischknecht, and Oscar Nierstrasz. Security code smells in Android ICC. *Empirical Software Engineering*, 24(5):3046–3076, October 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9673-y.

Binkley:2019:CTL

[924] David Binkley, Nicolas Gold, Syed Islam, Jens Krinke, and Shin Yoo. A comparison of tree- and line-oriented observational slicing. *Empirical Software Engineering*, 24(5):3077–3113, October 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-018-9675-9.

Liva:2019:SDE

[925] Giovanni Liva, Muhammad Taimoor Khan, and Martin Pinzger. Semantics-driven extraction of timed automata from Java programs. *Empirical Software Engineering*, 24(5):3114–3150, October 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09699-5; http://link.springer.com/content/pdf/10.1007/s10664-019-09699-5.pdf.

Bowes:2019:GES

[926] David Bowes, Emad Shihab, and Burak Turhan. Guest editorial: special section on predictive models and data analytics in software engineering. *Empirical Software Engineering*, 24(5):3151–3152, October 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09746-1.

Minku:2019:NOS

[927] Leandro L. Minku. A novel online supervised hyperparameter tuning procedure applied to cross-company software effort estimation. *Empirical Software Engineering*, 24(5):3153–3204, October 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09686-w; http://link.springer.com/content/pdf/10.1007/s10664-019-09686-w.pdf.

Coppola:2019:SGT

[928] Riccardo Coppola, Maurizio Morisio, Marco Torchiano, and Luca Ardito. Scripted GUI testing of Android open-source apps: evolution of test code and fragility causes. *Empirical Software Engineering*, 24(5):3205–3248, October 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09722-9.

Panichella:2019:GES

[929] Sebastiano Panichella, Fabio Palomba, David Lo, and Meiyappan Nagappan. Guest editorial: Special issue on software engineering for mobile applications. *Empirical Software Engineering*, 24(6):3249–3254, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09776-9; http://link.springer.com/content/pdf/10.1007/s10664-019-09776-9.pdf`.

Farias:2019:DSC

[930] Roselane Silva Farias, Renata Maria de Souza, John D. McGregor, and Eduardo Santana de Almeida. Designing smart city mobile applications. *Empirical Software Engineering*, 24(6): 3255–3289, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09723-8`.

Al-Subaihin:2019:ECT

[931] Afnan Al-Subaihin, Federica Sarro, Sue Black, and Licia Capra. Empirical comparison of text-based mobile apps similarity measurement techniques. *Empirical Software Engineering*, 24(6): 3290–3315, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09726-5; http://link.springer.com/content/pdf/10.1007/s10664-019-09726-5.pdf`.

Martens:2019:TUD

[932] Daniel Martens and Walid Maalej. Towards understanding and detecting fake reviews in app stores. *Empirical Software Engineering*, 24(6): 3316–3355, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09706-9; http://link.springer.com/content/pdf/10.1007/s10664-019-09706-9.pdf`.

Mateus:2019:ESQ

[933] Bruno Góis Mateus and Matias Martinez. An empirical study on quality of Android applications written in Kotlin language. *Empirical Software Engineering*, 24(6):3356–3393, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09727-4`.

Zeng:2019:SCL

[934] Yi Zeng, Jinfu Chen, Weiyi Shang, and Tse-Hsun (Peter) Chen. Studying the characteristics of logging practices in mobile apps: a case study on F-Droid. *Empirical Software Engineering*, 24(6): 3394–3434, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09687-9`.

Liu:2019:DCD

[935] Yepang Liu, Jue Wang, Lili Wei, Chang Xu, Shing-Chi Cheung, Tianyong Wu, Jun Yan, and Jian Zhang. DroidLeaks: a comprehensive database of resource leaks in Android apps. *Empirical Software Engineering*, 24(6): 3435–3483, December 2019. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09715-8.

Afjehei:2019:ICD

[936] Sara Seif Afjehei, Tse-Hsun (Peter) Chen, and Nikolaos Tsantalis. iPerfDetector: Characterizing and detecting performance anti-patterns in iOS applications. *Empirical Software Engineering*, 24(6):3484–3513, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09703-y.

Wang:2019:DSM

[937] Xu Wang, Chunyang Chen, and Zhenchang Xing. Domain-specific machine translation with recurrent neural network for software localization. *Empirical Software Engineering*, 24(6):3514–3545, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09702-z.

Carvalho:2019:ECC

[938] Suelen Goularte Carvalho, Maurício Aniche, Júlio Veríssimo, Rafael S. Durelli, and Marco Aurélio Gerosa. An empirical catalog of code smells for the presentation layer of Android apps. *Empirical Software Engineering*, 24(6):3546–3586, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09768-9; http://link.springer.com/content/pdf/10.1007/s10664-019-09768-9.pdf.

Khanmohammadi:2019:ESA

[939] Kobra Khanmohammadi, Neda Ebrahimi, Abdelwahab Hamou-Lhadj, and Raphaël Khoury. Empirical study of Android repackaged applications. *Empirical Software Engineering*, 24(6):3587–3629, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09760-3.

Cotroneo:2019:EFA

[940] Domenico Cotroneo, Antonio Ken Iannillo, and Roberto Natella. Evolutionary fuzzing of Android OS vendor system services. *Empirical Software Engineering*, 24(6):3630–3658, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09725-6.

Jha:2019:MNF

[941] Nishant Jha and Anas Mahmoud. Mining non-functional requirements from App store reviews. *Empirical Software Engineering*, 24(6):3659–3695, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09716-7.

Jan:2019:SBM

[942] Sadeeq Jan, Annibale Panichella, Andrea Arcuri, and Lionel Briand. Search-based multi-vulnerability testing of XML injections in web applications. *Empirical Software Engineering*, 24(6):3696–3729, December 2019. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09707-8; http://link.springer.com/content/pdf/10.1007/s10664-019-09707-8.pdf. See correction [943].

Jan:2019:CSB

[943] Sadeeq Jan, Annibale Panichella, Andrea Arcuri, and Lionel Briand. Correction to: Search-based multi-vulnerability testing of XML injections in web applications. *Empirical Software Engineering*, 24(6):3730, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09732-7; http://link.springer.com/content/pdf/10.1007/s10664-019-09732-7.pdf. See [942].

Foucault:2019:FGC

[944] Matthieu Foucault, Xavier Blanc, Jean-Rémy Falleri, and Margaret-Anne Storey. Fostering good coding practices through individual feedback and gamification: an industrial case study. *Empirical Software Engineering*, 24(6):3731–3754, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09719-4.

Nayebi:2019:EWM

[945] Maleknaz Nayebi, Liam Dicke, Ron Ittyipe, Chris Carlson, and Guenther Ruhe. ESSMArT way to manage customer requests. *Empirical Software Engineering*, 24(6):3755–3789, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09721-w.

Mezouar:2019:EST

[946] Mariam El Mezouar, Feng Zhang, and Ying Zou. An empirical study on the teams structures in social coding using GitHub projects. *Empirical Software Engineering*, 24(6):3790–3823, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09700-1.

Sawant:2019:RRP

[947] Anand Ashok Sawant, Romain Robbes, and Alberto Bacchelli. To react, or not to react: Patterns of reaction to API deprecation. *Empirical Software Engineering*, 24(6):3824–3870, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09713-w; http://link.springer.com/content/pdf/10.1007/s10664-019-09713-w.pdf.

Zou:2019:HDC

[948] Weiqin Zou, Jifeng Xuan, Xiaoyuan Xie, Zhenyu Chen, and Baowen Xu. How does code style inconsistency affect pull request integration? An exploratory study on 117 GitHub projects. *Empirical Software Engineering*, 24(6):3871–3903, December 2019. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09720-x.

Viticchie:2020:EAE

[949] Alessio Viticchié, Leonardo Regano, Cataldo Basile, Marco Torchiano, Mariano Ceccato, and Paolo Tonella. Empirical assessment of the effort needed to attack programs protected with client/server code splitting. *Empirical Software Engineering*, 25(1):1–48, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09738-1`.

Catolino:2020:ICP

[950] Gemma Catolino, Fabio Palomba, Francesca Arcelli Fontana, Andrea De Lucia, Andy Zaidman, and Filomena Ferrucci. Improving change prediction models with code smell-related information. *Empirical Software Engineering*, 25(1):49–95, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09739-0`.

Soltani:2020:BBE

[951] Mozhan Soltani, Pouria Derakhshanfar, Xavier Devroey, and Arie van Deursen. A benchmark-based evaluation of search-based crash reproduction. *Empirical Software Engineering*, 25(1):96–138, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09762-1; http://link.springer.com/content/pdf/10.1007/s10664-019-09762-1.pdf`.

Zhou:2020:BTQ

[952] Jiayuan Zhou, Shaowei Wang, Cor-Paul Bezemer, and Ahmed E. Hassan. Bounties on technical Q&A sites: a case study of Stack Overflow bounties. *Empirical Software Engineering*, 25(1):139–177, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09744-3`.

Ranganath:2020:FAA

[953] Venkatesh-Prasad Ranganath and Joydeep Mitra. Are free Android app security analysis tools effective in detecting known vulnerabilities? *Empirical Software Engineering*, 25(1):178–219, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09749-y`.

Ochodek:2020:RLC

[954] Miroslaw Ochodek, Regina Hebig, Wilhelm Meding, Gert Frost, and Miroslaw Staron. Recognizing lines of code violating company-specific coding guidelines using machine learning. *Empirical Software Engineering*, 25(1):220–265, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09769-8; http://link.springer.com/content/pdf/10.1007/s10664-019-09769-8.pdf`.

Razzaq:2020:EAB

[955] Abdul Razzaq, Andrew Le Gear, Chris Exton, and Jim Buckley. An empirical assessment of baseline feature

location techniques. *Empirical Software Engineering*, 25(1):266–321, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09734-5.

Li:2020:WDG

[956] Paul Luo Li, Amy J. Ko, and Andrew Begel. What distinguishes great software engineers? *Empirical Software Engineering*, 25(1):322–352, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09773-y.

Kitchenham:2020:MAF

[957] Barbara Kitchenham, Lech Madeyski, and Pearl Brereton. Meta-analysis for families of experiments in software engineering: a systematic review and reproducibility and validity assessment. *Empirical Software Engineering*, 25 (1):353–401, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09747-0; http://link.springer.com/content/pdf/10.1007/s10664-019-09747-0.pdf.

Vale:2020:RBG

[958] Gustavo Vale, Angelika Schmid, Alcemir Rodrigues Santos, Eduardo Santana de Almeida, and Sven Apel. On the relation between Github communication activity and merge conflicts. *Empirical Software Engineering*, 25 (1):402–433, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09774-x.

Chekam:2020:SFR

[959] Thierry Titcheu Chekam, Mike Papadakis, Tegawendé F. Bissyandé, Yves Le Traon, and Koushik Sen. Selecting fault revealing mutants. *Empirical Software Engineering*, 25(1): 434–487, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09778-7; http://link.springer.com/content/pdf/10.1007/s10664-019-09778-7.pdf.

Yao:2020:LSU

[960] Kundi Yao, Guilherme B. de Pádua, Weiyi Shang, Catalin Sporea, Andrei Toma, and Sarah Sajedi. Log4Perf: suggesting and updating logging locations for web-based systems' performance monitoring. *Empirical Software Engineering*, 25(1):488–531, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09748-z.

Guo:2020:CCO

[961] Hui Guo, Özgür Kafalı, Anne-Liz Jeukeng, Laurie Williams, and Munindar P. Singh. Çorba: crowdsourcing to obtain requirements from regulations and breaches. *Empirical Software Engineering*, 25(1):532–561, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09753-2.

Brindescu:2020:EIM

[962] Caius Brindescu, Iftekhar Ahmed, Carlos Jensen, and Anita Sarma. An empirical investigation into merge conflicts and their effect on software quality. *Empirical Software Engineering*, 25 (1):562–590, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09735-4`.

Xiang:2020:GDO

[963] Yi Xiang, Xiaowei Yang, Yuren Zhou, Zibin Zheng, Miqing Li, and Han Huang. Going deeper with optimal software products selection using many-objective optimization and satisfiability solvers. *Empirical Software Engineering*, 25(1):591–626, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09761-2`.

Kruger:2020:SRR

[964] Jacob Krüger, Christian Lausberger, Ivonne von Nostitz-Wallwitz, Gunter Saake, and Thomas Leich. Search. Review. Repeat? An empirical study of threats to replicating SLR searches. *Empirical Software Engineering*, 25 (1):627–677, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09763-0`.

Ghanavati:2020:MRL

[965] Mohammadreza Ghanavati, Diego Costa, Janos Seboek, David Lo, and Artur Andrzejak. Memory and resource leak defects and their repairs in Java projects. *Empirical Software Engineering*, 25(1):678–718, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09731-8`.

Kim:2020:ECB

[966] Jindae Kim, Jeongho Kim, Eunseok Lee, and Sunghun Kim. The effectiveness of context-based change application on automatic program repair. *Empirical Software Engineering*, 25(1):719–754, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09770-1`.

Xu:2020:WRW

[967] Bowen Xu, Le An, Ferdian Thung, Foutse Khomh, and David Lo. Why reinventing the wheels? An empirical study on library reuse and reimplementation. *Empirical Software Engineering*, 25(1):755–789, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09771-0`.

Nugroho:2020:HDD

[968] Yusuf Sulistyo Nugroho, Hideaki Hata, and Kenichi Matsumoto. How different are different diff algorithms in Git? *Empirical Software Engineering*, 25(1):790–823, January 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.`

1007/s10664-019-09772-z; http://link.springer.com/content/pdf/10.1007/s10664-019-09772-z.pdf.

Fearon:2020:RA

[969] Melissa Fearon. 2019 reviewer acknowledgment. *Empirical Software Engineering*, 25(2):1031–1034, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09813-y.

Heeager:2020:MAP

[970] Lise Tordrup Heeager and Peter Axel Nielsen. Meshing agile and plan-driven development in safety-critical software: a case study. *Empirical Software Engineering*, 25(2):1035–1062, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09804-z.

Allodi:2020:MAS

[971] Luca Allodi, Marco Cremonini, Fabio Massacci, and Woohyun Shim. Measuring the accuracy of software vulnerability assessments: experiments with students and professionals. *Empirical Software Engineering*, 25(2):1063–1094, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09797-4; http://link.springer.com/content/pdf/10.1007/s10664-019-09797-4.pdf.

Zampetti:2020:ECB

[972] Fiorella Zampetti, Carmine Vassallo, Sebastiano Panichella, Gerardo Canfora, Harald Gall, and Massimiliano Di Penta. An empirical characterization of bad practices in continuous integration. *Empirical Software Engineering*, 25(2):1095–1135, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09785-8.

Amreen:2020:AAL

[973] Sadika Amreen, Audris Mockus, Russell Zaretzki, Christopher Bogart, and Yuxia Zhang. ALFAA: Active Learning Fingerprint based Anti-Aliasing for correcting developer identity errors in version control systems. *Empirical Software Engineering*, 25(2):1136–1167, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09786-7.

Abdalkareem:2020:IUT

[974] Rabe Abdalkareem, Vinicius Oda, Suhaib Mujahid, and Emad Shihab. On the impact of using trivial packages: an empirical case study on npm and PyPI. *Empirical Software Engineering*, 25(2):1168–1204, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09792-9.

Amalio:2020:ESV

[975] Nuno Amálio, Lionel Briand, and Pierre Kelsen. An experimental scrutiny of visual design modelling: VCL up against UML+OCL. *Empirical Software Engineering*, 25(2):1205–1258, March 2020. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09784-9; http://link.springer.com/content/pdf/10.1007/s10664-019-09784-9.pdf.

Sayagh:2020:WSY

[976] Mohammed Sayagh, Noureddine Kerzazi, Fabio Petrillo, Khalil Bennani, and Bram Adams. What should your runtime configuration framework do to help developers? *Empirical Software Engineering*, 25(2):1259–1293, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09790-x.

Rodriguez-Perez:2020:HBB

[977] Gema Rodríguez-Pérez, Gregorio Robles, Alexander Serebrenik, Andy Zaidman, Daniel M. Germán, and Jesus M. Gonzalez-Barahona. How bugs are born: a model to identify how bugs are introduced in software components. *Empirical Software Engineering*, 25(2):1294–1340, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09781-y; http://link.springer.com/content/pdf/10.1007/s10664-019-09781-y.pdf.

Patil:2020:PSD

[978] Sangameshwar Patil and B. Ravindran. Predicting software defect type using concept-based classification. *Empirical Software Engineering*, 25(2):1341–1378, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09779-6.

DiPenta:2020:GES

[979] Massimiliano Di Penta and David C. Shepherd. Guest editorial: special section on software analysis, evolution, and reengineering. *Empirical Software Engineering*, 25(2):1379–1381, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09812-z; http://link.springer.com/content/pdf/10.1007/s10664-020-09812-z.pdf.

Chen:2020:SFC

[980] Xin Chen, He Jiang, Xiaochen Li, Liming Nie, Dongjin Yu, Tieke He, and Zhenyu Chen. A systemic framework for crowdsourced test report quality assessment. *Empirical Software Engineering*, 25(2):1382–1418, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09793-8; http://link.springer.com/content/pdf/10.1007/s10664-019-09793-8.pdf.

Vassallo:2020:HDE

[981] Carmine Vassallo, Sebastiano Panichella, Fabio Palomba, Sebastian Proksch, Harald C. Gall, and Andy Zaidman. How developers engage with static analysis tools in different contexts. *Empirical Software Engineering*, 25(2):1419–1457, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.

1007/s10664-019-09750-5; http://link.springer.com/content/pdf/10.1007/s10664-019-09750-5.pdf.

Brito:2020:YBM

[982] Aline Brito, Marco Tulio Valente, Laerte Xavier, and Andre Hora. You broke my code: understanding the motivations for breaking changes in APIs. *Empirical Software Engineering*, 25(2):1458–1492, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09756-z; http://link.springer.com/content/pdf/10.1007/s10664-019-09756-z.pdf.

Ahasanuzzaman:2020:CST

[983] Md Ahasanuzzaman, Muhammad Asaduzzaman, Chanchal K. Roy, and Kevin A. Schneider. CAPS: a supervised technique for classifying Stack Overflow posts concerning API issues. *Empirical Software Engineering*, 25 (2):1493–1532, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09743-4; http://link.springer.com/content/pdf/10.1007/s10664-019-09743-4.pdf.

Tosun:2020:GES

[984] Ayse Tosun, Shane McIntosh, Leandro Minku, and Burak Turhan. Guest editorial: Special issue on predictive models and data analytics in software engineering. *Empirical Software Engineering*, 25(2):1533–1535, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09811-0; http://link.springer.com/content/pdf/10.1007/s10664-020-09811-0.pdf.

Alahmadi:2020:CLP

[985] Mohammad Alahmadi, Abdulkarim Khormi, Biswas Parajuli, Jonathan Hassel, Sonia Haiduc, and Piyush Kumar. Code localization in programming screencasts. *Empirical Software Engineering*, 25(2):1536–1572, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09759-w.

Amasaki:2020:CVD

[986] Sousuke Amasaki. Cross-version defect prediction: use historical data, cross-project data, or both? *Empirical Software Engineering*, 25(2):1573–1595, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09777-8.

Dey:2020:DUI

[987] Tapajit Dey and Audris Mockus. Deriving a usage-independent software quality metric. *Empirical Software Engineering*, 25(2):1596–1641, March 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09791-w.

Anonymous:2020:ENE

[988] Anonymous. Editor's note: *Empirical Software Engineering* and COVID-19

research. *Empirical Software Engineering*, 25(3):1643, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09824-9; http://link.springer.com/content/pdf/10.1007/s10664-020-09824-9.pdf.

Mazuera-Rozo:2020:ITS

[989] Alejandro Mazuera-Rozo, Catia Trubiani, Mario Linares-Vásquez, and Gabriele Bavota. Investigating types and survivability of performance bugs in mobile apps. *Empirical Software Engineering*, 25(3):1644–1686, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09795-6.

Garousi:2020:PRS

[990] Vahid Garousi, Markus Borg, and Markku Oivo. Practical relevance of software engineering research: synthesizing the community's voice. *Empirical Software Engineering*, 25(3):1687–1754, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09803-0; http://link.springer.com/content/pdf/10.1007/s10664-020-09803-0.pdf.

Berger:2020:SAC

[991] Thorsten Berger, Jan-Philipp Steghöfer, Tewfik Ziadi, Jacques Robin, and Jabier Martinez. The state of adoption and the challenges of systematic variability management in industry. *Empirical Software Engineering*, 25(3):1755–1797, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09787-6; http://link.springer.com/content/pdf/10.1007/s10664-019-09787-6.pdf.

Hora:2020:CME

[992] Andre Hora and Romain Robbes. Characteristics of method extractions in Java: a large scale empirical study. *Empirical Software Engineering*, 25(3):1798–1833, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09809-8.

Abdellatif:2020:MUB

[993] Ahmad Abdellatif, Khaled Badran, and Emad Shihab. MSRBot: Using bots to answer questions from software repositories. *Empirical Software Engineering*, 25(3):1834–1863, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09788-5.

Oliva:2020:ESS

[994] Gustavo A. Oliva, Ahmed E. Hassan, and Zhen Ming (Jack) Jiang. An exploratory study of smart contracts in the Ethereum blockchain platform. *Empirical Software Engineering*, 25(3):1864–1904, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09796-5.

Guo:2020:BCI

[995] Zhaoqiang Guo, Yanhui Li, Wanwangying Ma, Yuming Zhou, Hongmin Lu, Lin Chen, and Baowen Xu. Boosting crash-inducing change localization with rank-performance-based feature subset selection. *Empirical Software Engineering*, 25(3):1905–1950, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09802-1`.

Higo:2020:AAD

[996] Yoshiki Higo, Shinpei Hayashi, Hideaki Hata, and Meiyappan Nagappan. Ammonia: an approach for deriving project-specific bug patterns. *Empirical Software Engineering*, 25(3):1951–1979, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09807-w; http://link.springer.com/content/pdf/10.1007/s10664-020-09807-w.pdf`.

Koyuncu:2020:FMR

[997] Anil Koyuncu, Kui Liu, Tegawendé F. Bissyandé, Dongsun Kim, Jacques Klein, Martin Monperrus, and Yves Le Traon. FixMiner: Mining relevant fix patterns for automated program repair. *Empirical Software Engineering*, 25(3):1980–2024, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09780-z`.

Robert:2020:VLO

[998] Clément Robert, Thierry Sotiropoulos, Hélène Waeselynck, Jérémie Guiochet, and Simon Vernhes. The virtual lands of Oz: testing an agribot in simulation. *Empirical Software Engineering*, 25(3):2025–2054, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09800-3`.

Kamei:2020:GEM

[999] Yasutaka Kamei and Andy Zaidman. Guest editorial: Mining software repositories 2018. *Empirical Software Engineering*, 25(3):2055–2057, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09817-8; http://link.springer.com/content/pdf/10.1007/s10664-020-09817-8.pdf`.

Li:2020:CCD

[1000] Li Li, Jun Gao, Tegawendé F. Bissyandé, Lei Ma, Xin Xia, and Jacques Klein. CDA: Characterising deprecated Android APIs. *Empirical Software Engineering*, 25(3):2058–2098, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09764-z; http://link.springer.com/content/pdf/10.1007/s10664-019-09764-z.pdf`.

Agrawal:2020:BSA

[1001] Amritanshu Agrawal, Tim Menzies, Leandro L. Minku, Markus Wagner, and Zhe Yu. Better software analytics via "DUO": Data mining algorithms using/used-by optimizers. *Em-*

pirical Software Engineering, 25(3): 2099–2136, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09808-9.

Siegmund:2020:PSI

[1002] Janet Siegmund and Chanchal K. Roy. Preface to the special issue on program comprehension. *Empirical Software Engineering*, 25(3):2137–2139, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09806-x; http://link.springer.com/content/pdf/10.1007/s10664-020-09806-x.pdf. See correction [1207].

Fakhoury:2020:MIL

[1003] Sarah Fakhoury, Devjeet Roy, Yuzhan Ma, Venera Arnaoudova, and Olusola Adesope. Measuring the impact of lexical and structural inconsistencies on developers' cognitive load during bug localization. *Empirical Software Engineering*, 25(3):2140–2178, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09751-4.

Hu:2020:DCC

[1004] Xing Hu, Ge Li, Xin Xia, David Lo, and Zhi Jin. Deep code comment generation with hybrid lexical and syntactical information. *Empirical Software Engineering*, 25(3):2179–2217, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09730-9.

Vassallo:2020:EBY

[1005] Carmine Vassallo, Sebastian Proksch, Timothy Zemp, and Harald C. Gall. Every build you break: developer-oriented assistance for build failure resolution. *Empirical Software Engineering*, 25(3):2218–2257, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09765-y.

Beyer:2020:WKQ

[1006] Stefanie Beyer, Christian Macho, Massimiliano Di Penta, and Martin Pinzger. What kind of questions do developers ask on Stack Overflow? A comparison of automated approaches to classify posts into question categories. *Empirical Software Engineering*, 25(3):2258–2301, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09758-x; http://link.springer.com/content/pdf/10.1007/s10664-019-09758-x.pdf.

Li:2020:GLR

[1007] Shanshan Li, Xu Niu, Zhouyang Jia, Xiangke Liao, Ji Wang, and Tao Li. Guiding log revisions by learning from software evolution history. *Empirical Software Engineering*, 25(3):2302–2340, May 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-019-09757-y.

Danglot:2020:ABD

[1008] Benjamin Danglot, Martin Monperrus, Walter Rudametkin, and Benoit Baudry. An approach and benchmark to detect behavioral changes of commits in continuous integration. *Empirical Software Engineering*, 25 (4):2379–2415, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09794-7`.

LaToza:2020:EPS

[1009] Thomas D. LaToza, Maryam Arab, Dastyni Loksa, and Amy J. Ko. Explicit programming strategies. *Empirical Software Engineering*, 25(4): 2416–2449, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09810-1`.

Cinque:2020:EAE

[1010] Marcello Cinque, Raffaele Della Corte, and Antonio Pecchia. An empirical analysis of error propagation in critical software systems. *Empirical Software Engineering*, 25(4):2450–2484, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09801-2`.

Lee:2020:BPG

[1011] Daniel Lee, Dayi Lin, Cor-Paul Bezemer, and Ahmed E. Hassan. Building the perfect game — an empirical study of game modifications. *Empirical Software Engineering*, 25(4):2485–2518, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09783-w`.

Oliveira:2020:CCM

[1012] Edson Oliveira, Eduardo Fernandes, Igor Steinmacher, Marco Cristo, Tayana Conte, and Alessandro Garcia. Code and commit metrics of developer productivity: a study on team leaders perceptions. *Empirical Software Engineering*, 25(4):2519–2549, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09820-z`.

Bettaieb:2020:UML

[1013] Seifeddine Bettaieb, Seung Yeob Shin, Mehrdad Sabetzadeh, Lionel C. Briand, Michael Garceau, and Antoine Meyers. Using machine learning to assist with the selection of security controls during security assessment. *Empirical Software Engineering*, 25(4):2550–2582, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09814-x`.

Marques:2020:GSI

[1014] Rita Marques, Gonçalo Costa, Miguel Mira da Silva, Daniel Gonçalves, and Pedro Gonçalves. A gamification solution for improving Scrum adoption. *Empirical Software Engineering*, 25 (4):2583–2629, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09816-9`.

Engstrom:2020:HSE

[1015] Emelie Engström, Margaret-Anne Storey, Per Runeson, Martin Höst, and Maria Teresa Baldassarre. How software engineering research aligns with design science: a review. *Empirical Software Engineering*, 25(4): 2630–2660, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09818-7`; `http://link.springer.com/content/pdf/10.1007/s10664-020-09818-7.pdf`.

Hu:2020:HDC

[1016] Linghuan Hu, W. Eric Wong, D. Richard Kuhn, and Raghu N. Kacker. How does combinatorial testing perform in the real world: an empirical study. *Empirical Software Engineering*, 25 (4):2661–2693, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09799-2`.

Han:2020:WDP

[1017] Junxiao Han, Emad Shihab, Zhiyuan Wan, Shuiguang Deng, and Xin Xia. What do programmers discuss about deep learning frameworks. *Empirical Software Engineering*, 25(4):2694–2747, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09819-6`.

Das:2020:CES

[1018] Teerath Das, Massimiliano Di Penta, and Ivano Malavolta. Characterizing the evolution of statically-detectable performance issues of Android apps. *Empirical Software Engineering*, 25 (4):2748–2808, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-019-09798-3`.

Pudlitz:2020:WTW

[1019] Florian Pudlitz, Florian Brokhausen, and Andreas Vogelsang. What am I testing and where? Comparing testing procedures based on lightweight requirements annotations. *Empirical Software Engineering*, 25(4):2809–2843, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09815-w`; `http://link.springer.com/content/pdf/10.1007/s10664-020-09815-w.pdf`.

Vegas:2020:MPT

[1020] Sira Vegas, Patricia Riofrío, Esperanza Marcos, and Natalia Juristo. On (mis)perceptions of testing effectiveness: an empirical study. *Empirical Software Engineering*, 25(4): 2844–2896, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09805-y`.

Pickerill:2020:PCG

[1021] Peter Pickerill, Heiko Joshua Jungen, Mirosław Ochodek, Michał Maćkowiak, and Miroslaw Staron. PHANTOM: Curating GitHub for engineered software projects using time-series clustering. *Empirical Software Engineering*, 25(4):2897–2929, July 2020. CODEN

ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09825-8; http://link.springer.com/content/pdf/10.1007/s10664-020-09825-8.pdf.

Rousseau:2020:SPT

[1022] Guillaume Rousseau, Roberto Di Cosmo, and Stefano Zacchiroli. Software provenance tracking at the scale of public source code. *Empirical Software Engineering*, 25(4):2930–2959, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09828-5.

Morales:2020:RMH

[1023] Rodrigo Morales, Foutse Khomh, and Giuliano Antoniol. RePOR: Mimicking humans on refactoring tasks. Are we there yet? *Empirical Software Engineering*, 25(4):2960–2996, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09826-7.

Biorn-Hansen:2020:EIP

[1024] Andreas Biørn-Hansen, Christoph Rieger, Tor-Morten Grønli, Tim A. Majchrzak, and Gheorghita Ghinea. An empirical investigation of performance overhead in cross-platform mobile development frameworks. *Empirical Software Engineering*, 25(4):2997–3040, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09827-6; http://link.springer.com/content/pdf/10.1007/s10664-020-09827-6.pdf.

Palomba:2020:RNR

[1025] Fabio Palomba and Andy Zaidman. Retraction note: Retraction note to: The smell of fear: on the relation between test smells and flaky tests. *Empirical Software Engineering*, 25(4):3041, July 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09821-y; http://link.springer.com/content/pdf/10.1007/s10664-020-09821-y.pdf. See [919].

Yao:2020:SPG

[1026] Kundi Yao, Heng Li, Weiyi Shang, and Ahmed E. Hassan. A study of the performance of general compressors on log files. *Empirical Software Engineering*, 25(5):3043–3085, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09822-x.

Mills:2020:RBB

[1027] Chris Mills, Esteban Parra, Jevgenija Pantiuchina, Gabriele Bavota, and Sonia Haiduc. On the relationship between bug reports and queries for text retrieval-based bug localization. *Empirical Software Engineering*, 25(5):3086–3127, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09823-w.

Sharafi:2020:PGC

[1028] Zohreh Sharafi, Bonita Sharif, Yann-Gaël Guéhéneuc, Andrew Begel, Roman Bednarik, and Martha Crosby. A practical guide on conducting eye tracking studies in software engineering. *Empirical Software Engineering*, 25(5):3128–3174, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09829-4`.

Ponta:2020:DAM

[1029] Serena Elisa Ponta, Henrik Plate, and Antonino Sabetta. Detection, assessment and mitigation of vulnerabilities in open source dependencies. *Empirical Software Engineering*, 25(5): 3175–3215, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09830-x; http://link.springer.com/content/pdf/10.1007/s10664-020-09830-x.pdf`.

Rios:2020:PPV

[1030] Nicolli Rios, Rodrigo Oliveira Spínola, Manoel Mendonça, and Carolyn Seaman. The practitioners' point of view on the concept of technical debt and its causes and consequences: a design for a global family of industrial surveys and its first results from Brazil. *Empirical Software Engineering*, 25(5): 3216–3287, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09832-9`.

Kotti:2020:SSF

[1031] Zoe Kotti, Konstantinos Kravvaritis, Konstantina Dritsa, and Diomidis Spinellis. Standing on shoulders or feet? An extended study on the usage of the MSR data papers. *Empirical Software Engineering*, 25(5): 3288–3322, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09834-7`.

Krutauz:2020:DCR

[1032] Andrey Krutauz, Tapajit Dey, Peter C. Rigby, and Audris Mockus. Do code review measures explain the incidence of post-release defects? *Empirical Software Engineering*, 25(5): 3323–3356, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09837-4`.

Cotroneo:2020:CSS

[1033] Domenico Cotroneo, Antonio Ken Iannillo, Roberto Natella, and Roberto Pietrantuono. A comprehensive study on software aging across Android versions and vendors. *Empirical Software Engineering*, 25(5):3357–3395, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09838-3`.

Lee:2020:ESC

[1034] Daniel Lee, Gopi Krishnan Rajbahadur, Dayi Lin, Mohammed Sayagh, Cor-Paul Bezemer, and Ahmed E. Hassan. An empirical study of the char-

acteristics of popular Minecraft mods. *Empirical Software Engineering*, 25(5): 3396–3429, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09840-9`.

Rahman:2020:LCA

[1035] Akond Rahman, Effat Farhana, and Laurie Williams. The 'as code' activities: development anti-patterns for infrastructure as code. *Empirical Software Engineering*, 25(5):3430–3467, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09841-8`.

Krishna:2020:LAA

[1036] Rahul Krishna and Tim Menzies. Learning actionable analytics from multiple software projects. *Empirical Software Engineering*, 25(5):3468–3500, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09843-6`.

Chapetta:2020:TEB

[1037] Wladmir Araujo Chapetta and Guilherme Horta Travassos. Towards an evidence-based theoretical framework on factors influencing the software development productivity. *Empirical Software Engineering*, 25(5): 3501–3543, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09844-5`.

Aktas:2020:AIA

[1038] Ethem Utku Aktas and Cemal Yilmaz. Automated issue assignment: results and insights from an industrial case. *Empirical Software Engineering*, 25(5): 3544–3589, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09846-3`.

Jiarpakdee:2020:IAF

[1039] Jirayus Jiarpakdee, Chakkrit Tantithamthavorn, and Christoph Treude. The impact of automated feature selection techniques on the interpretation of defect models. *Empirical Software Engineering*, 25(5):3590–3638, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09848-1`.

Alami:2020:TPA

[1040] Adam Alami, Peter Axel Nielsen, and Andrzej Waşowski. A tailored participatory action research for FOSS communities. *Empirical Software Engineering*, 25(5):3639–3670, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09849-0`.

Wang:2020:TFC

[1041] Chunhui Wang, Wei Zhang, Haiyan Zhao, and Zhi Jin. Towards a fictional collective programming scenario: an approach based on the EIF loop. *Empirical Software Engineering*, 25(5): 3671–3710, September 2020. CODEN

ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09850-7.

Hajri:2020:AST

[1042] Ines Hajri, Arda Goknil, Fabrizio Pastore, and Lionel C. Briand. Automating system test case classification and prioritization for use case-driven testing in product lines. *Empirical Software Engineering*, 25(5): 3711–3769, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09853-4.

Maipradit:2020:WII

[1043] Rungroj Maipradit, Christoph Treude, Hideaki Hata, and Kenichi Matsumoto. Wait for it: identifying "On-Hold" self-admitted technical debt. *Empirical Software Engineering*, 25(5): 3770–3798, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09854-3; http://link.springer.com/content/pdf/10.1007/s10664-020-09854-3.pdf. See correction [1111].

Linaaker:2020:WSW

[1044] Johan Linåker and Björn Regnell. What to share, when, and where: balancing the objectives and complexities of open source software contributions. *Empirical Software Engineering*, 25(5): 3799–3840, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09855-2; http://link.springer.com/content/pdf/10.1007/s10664-020-09855-2.pdf.

Ros:2020:DDS

[1045] Rasmus Ros and Mikael Hammar. Data-driven software design with Constraint Oriented Multi-variate Bandit Optimization (COMBO). *Empirical Software Engineering*, 25(5): 3841–3872, September 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09856-1; http://link.springer.com/content/pdf/10.1007/s10664-020-09856-1.pdf.

Hunsen:2020:FCR

[1046] Claus Hunsen, Janet Siegmund, and Sven Apel. On the fulfillment of coordination requirements in open-source software projects: an exploratory study. *Empirical Software Engineering*, 25(6):4379–4426, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09833-8.

Jolak:2020:SEW

[1047] Rodi Jolak, Maxime Savary-Leblanc, Manuela Dalibor, Andreas Wortmann, Regina Hebig, Juraj Vincur, Ivan Polasek, Xavier Le Pallec, Sébastien Gérard, and Michel R. V. Chaudron. Software engineering whispers: The effect of textual vs. graphical software design descriptions on software design communication. *Empirical Software Engineering*, 25(6):4427–4471, November 2020. CODEN ESENFW. ISSN

1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09835-6; http://link.springer.com/content/pdf/10.1007/s10664-020-09835-6.pdf.

Jolak:2020:CSE

[1048] Rodi Jolak, Maxime Savary-Leblanc, Manuela Dalibor, Andreas Wortmann, Regina Hebig, Juraj Vincur, Ivan Polasek, Xavier Le Pallec, Sébastien Gérard, and Michel R. V. Chaudron. Correction to: Software engineering whispers: The effect of textual vs. graphical software design descriptions on software design communication. *Empirical Software Engineering*, 25 (6):4472, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09889-6; http://link.springer.com/content/pdf/10.1007/s10664-020-09889-6.pdf.

Gleirscher:2020:FMD

[1049] Mario Gleirscher and Diego Marmsoler. Formal methods in dependable systems engineering: a survey of professionals from Europe and North America. *Empirical Software Engineering*, 25(6): 4473–4546, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09836-5; http://link.springer.com/content/pdf/10.1007/s10664-020-09836-5.pdf.

Xu:2020:MUH

[1050] Yisen Xu, Fan Wu, Xiangyang Jia, Lingbo Li, and Jifeng Xuan. Mining the use of higher-order functions: an exploratory study on Scala programs. *Empirical Software Engineering*, 25(6): 4547–4584, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09842-7.

Heumuller:2020:PPD

[1051] Robert Heumüller, Sebastian Nielebock, Jacob Krüger, and Frank Ortmeier. Publish or perish, but do not forget your software artifacts. *Empirical Software Engineering*, 25(6): 4585–4616, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09851-6; http://link.springer.com/content/pdf/10.1007/s10664-020-09851-6.pdf.

Kondo:2020:CCS

[1052] Masanari Kondo, Gustavo A. Oliva, Zhen Ming (Jack) Jiang, Ahmed E. Hassan, and Osamu Mizuno. Code cloning in smart contracts: a case study on verified contracts from the Ethereum blockchain platform. *Empirical Software Engineering*, 25(6): 4617–4675, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09852-5.

Wang:2020:BRA

[1053] Tao Wang, Xiao Yu, Zhengyi Qiu, Guoliang Jin, and Frank Mueller. BarrierFinder: recognizing ad hoc barriers. *Empirical Software Engineering*, 25(6): 4676–4706, November 2020. CODEN

ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09862-3.

daSilva:2020:CES

[1054] Rodrigo Fernandes Gomes da Silva, Chanchal K. Roy, Mohammad Masudur Rahman, Kevin A. Schneider, Klérisson Paixão, Carlos Eduardo de Carvalho Dantas, and Marcelo de Almeida Maia. CROKAGE: effective solution recommendation for programming tasks by leveraging crowd knowledge. *Empirical Software Engineering*, 25(6):4707–4758, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09863-2.

Said:2020:MUS

[1055] Wasim Said, Jochen Quante, and Rainer Koschke. Mining understandable state machine models from embedded code. *Empirical Software Engineering*, 25(6):4759–4804, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09865-0; http://link.springer.com/content/pdf/10.1007/s10664-020-09865-0.pdf.

Falessi:2020:NPO

[1056] Davide Falessi, Jacky Huang, Likhita Narayana, Jennifer Fong Thai, and Burak Turhan. On the need of preserving order of data when validating within-project defect classifiers. *Empirical Software Engineering*, 25(6):4805–4830, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09868-x; http://link.springer.com/content/pdf/10.1007/s10664-020-09868-x.pdf. See correction [1057].

Falessi:2020:CNP

[1057] Davide Falessi, Jacky Huang, Likhita Narayana, Jennifer Fong Thai, and Burak Turhan. Correction to: On the need of preserving order of data when validating within-project defect classifiers. *Empirical Software Engineering*, 25(6):4831–4832, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09890-z; http://link.springer.com/content/pdf/10.1007/s10664-020-09890-z.pdf. See [1056].

Panichella:2020:EIR

[1058] Sebastiano Panichella and Nik Zaugg. An empirical investigation of relevant changes and automation needs in modern code review. *Empirical Software Engineering*, 25(6):4833–4872, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09870-3; http://link.springer.com/content/pdf/10.1007/s10664-020-09870-3.pdf.

Moslehi:2020:FLA

[1059] Parisa Moslehi, Bram Adams, and Juergen Rilling. A feature location approach for mapping application features extracted from crowd-

based screencasts to source code. *Empirical Software Engineering*, 25(6): 4873–4926, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09874-z.

Ralph:2020:PP

[1060] Paul Ralph, Sebastian Baltes, Gianisa Adisaputri, Richard Torkar, Vladimir Kovalenko, Marcos Kalinowski, Nicole Novielli, Shin Yoo, Xavier Devroey, Xin Tan, Minghui Zhou, Burak Turhan, Rashina Hoda, Hideaki Hata, Gregorio Robles, and et al. Pandemic programming. *Empirical Software Engineering*, 25(6): 4927–4961, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09875-y; http://link.springer.com/content/pdf/10.1007/s10664-020-09875-y.pdf.

Masood:2020:HAT

[1061] Zainab Masood, Rashina Hoda, and Kelly Blincoe. How agile teams make self-assignment work: a grounded theory study. *Empirical Software Engineering*, 25(6):4962–5005, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09876-x; http://link.springer.com/content/pdf/10.1007/s10664-020-09876-x.pdf.

Scalabrino:2020:ACI

[1062] Simone Scalabrino, Gabriele Bavota, Mario Linares-Vásquez, Valentina Piantadosi, Michele Lanza, and Rocco Oliveto. API compatibility issues in Android: Causes and effectiveness of data-driven detection techniques. *Empirical Software Engineering*, 25(6): 5006–5046, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09877-w; http://link.springer.com/content/pdf/10.1007/s10664-020-09877-w.pdf.

Bangash:2020:TBC

[1063] Abdul Ali Bangash, Hareem Sahar, Abram Hindle, and Karim Ali. On the time-based conclusion stability of cross-project defect prediction models. *Empirical Software Engineering*, 25(6): 5047–5083, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09878-9.

Demissie:2020:SAP

[1064] Biniam Fisseha Demissie, Mariano Ceccato, and Lwin Khin Shar. Security analysis of permission re-delegation vulnerabilities in Android apps. *Empirical Software Engineering*, 25(6): 5084–5136, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09879-8; http://link.springer.com/content/pdf/10.1007/s10664-020-09879-8.pdf.

Trautsch:2020:LSS

[1065] Alexander Trautsch, Steffen Herbold, and Jens Grabowski. A longitudinal study of static analysis warning evolu-

tion and the effects of PMD on software quality in Apache open source projects. *Empirical Software Engineering*, 25(6): 5137–5192, November 2020. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09880-1`; `http://link.springer.com/content/pdf/10.1007/s10664-020-09880-1.pdf`.

Ebert:2021:ESC

[1066] Felipe Ebert, Fernando Castor, Nicole Novielli, and Alexander Serebrenik. An exploratory study on confusion in code reviews. *Empirical Software Engineering*, 26(1):??, January 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09909-5`; `http://link.springer.com/content/pdf/10.1007/s10664-020-09909-5.pdf`.

Ramos-Gutierrez:2021:DCW

[1067] Belén Ramos-Gutiérrez, Ángel Jesús Varela-Vaca, José A. Galindo, María Teresa Gómez-López, and David Benavides. Discovering configuration workflows from existing logs using process mining. *Empirical Software Engineering*, 26(1):??, January 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09911-x`.

Wang:2021:CCA

[1068] Xiajing Wang, Changzhen Hu, Rui Ma, Donghai Tian, and Jinyuan He. CMFuzz: context-aware adaptive mutation for fuzzers. *Empirical Software Engineering*, 26(1):??, January 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09927-3`.

Kermansaravi:2021:IDA

[1069] Zeinab Azadeh Kermansaravi, Md Saidur Rahman, Foutse Khomh, Fehmi Jaafar, and Yann-Gaël Guéhéneuc. Investigating design anti-pattern and design pattern mutations and their change- and fault-proneness. *Empirical Software Engineering*, 26(1):??, January 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09900-0`.

Chen:2021:DCB

[1070] An Ran Chen, Tse-Hsun (Peter) Chen, and Shaowei Wang. Demystifying the challenges and benefits of analyzing user-reported logs in bug reports. *Empirical Software Engineering*, 26(1):??, January 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09893-w`.

Wu:2021:SOV

[1071] Daoyuan Wu, Debin Gao, and David Lo. Scalable online vetting of Android apps for measuring declared SDK versions and their consistency with API calls. *Empirical Software Engineering*, 26(1):??, January 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09897-6`.

Temple:2021:EAG

[1072] Paul Temple, Gilles Perrouin, Mathieu Acher, Battista Biggio, Jean-Marc Jézéquel, and Fabio Roli. Empirical assessment of generating adversarial configurations for software product lines. *Empirical Software Engineering*, 26(1):??, January 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09915-7`.

Mondal:2021:ICM

[1073] Manishankar Mondal, Banani Roy, Chanchal K. Roy, and Kevin A. Schneider. ID-correspondence: a measure for detecting evolutionary coupling. *Empirical Software Engineering*, 26(1):??, January 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09921-9`.

Damasceno:2021:LSL

[1074] Carlos Diego Nascimento Damasceno, Mohammad Reza Mousavi, and Adenilso da Silva Simao. Learning by sampling: learning behavioral family models from software product lines. *Empirical Software Engineering*, 26 (1):??, January 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09912-w`.

Shastri:2021:SAR

[1075] Yogeshwar Shastri, Rashina Hoda, and Robert Amor. Spearheading agile: the role of the scrum master in agile projects. *Empirical Software Engineering*, 26(1):??, January 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09899-4`.

Fan:2021:WMP

[1076] Yuanrui Fan, Xin Xia, David Lo, Ahmed E. Hassan, and Shanping Li. What makes a popular academic AI repository? *Empirical Software Engineering*, 26(1):??, January 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09916-6`.

Mahdavi-Hezaveh:2021:SDF

[1077] Rezvan Mahdavi-Hezaveh, Jacob Dremann, and Laurie Williams. Software development with feature toggles: practices used by practitioners. *Empirical Software Engineering*, 26(1):??, January 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09901-z`.

Nassif:2021:WSA

[1078] Mathieu Nassif and Martin P. Robillard. Wikifying software artifacts. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09918-4`.

Lindohf:2021:SPL

[1079] Robert Lindohf, Jacob Krüger, Erik Herzog, and Thorsten Berger. Soft-

ware product-line evaluation in the large. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09913-9; http://link.springer.com/content/pdf/10.1007/s10664-020-09913-9.pdf`.

Ahmed:2021:LLP

[1080] Toufique Ahmed, Premkumar Devanbu, and Vincent J. Hellendoorn. Learning lenient parsing & typing via indirect supervision. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-021-09942-y`.

Karhap:2021:SMQ

[1081] Pertti Karhapää, Woubshet Behutiye, Pilar Rodríguez, Markku Oivo, Dolors Costal, Xavier Franch, Sanja Aaramaa, Michał Choraś, Jari Partanen, and Antonin Abherve. Strategies to manage quality requirements in agile software development: a multiple case study. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09903-x; http://link.springer.com/content/pdf/10.1007/s10664-020-09903-x.pdf`.

Chen:2021:HHW

[1082] Xiaowei Chen, Rabe Abdalkareem, Suhaib Mujahid, Emad Shihab, and Xin Xia. Helping or not helping? Why and how trivial packages impact the npm ecosystem. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09904-w`.

Olsson:2021:VMS

[1083] Thomas Olsson, Krzysztof Wnuk, and Slinger Jansen. A validated model for the scoping process of quality requirements: a multi-case study. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09896-7; http://link.springer.com/content/pdf/10.1007/s10664-020-09896-7.pdf`.

Diaz:2021:WMB

[1084] Jessica Díaz, Daniel López-Fernández, Jorge Pérez, and Ángel González-Prieto. Why are many businesses instilling a DevOps culture into their organization? *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09919-3`.

Kuiter:2021:VEC

[1085] Elias Kuiter, Sebastian Krieter, Jacob Krüger, Gunter Saake, and Thomas Leich. variED: an editor for collaborative, real-time feature modeling. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09892-x; http://link.springer.com/content/pdf/10.1007/s10664-020-09892-x.pdf.

Grebhahn:2021:LSA

[1086] Alexander Grebhahn, Christian Kaltenecker, Christian Engwer, Norbert Siegmund, and Sven Apel. Lightweight, semi-automatic variability extraction: a case study on scientific computing. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09922-8; http://link.springer.com/content/pdf/10.1007/s10664-020-09922-8.pdf.

Ma:2021:WCE

[1087] Yuxing Ma, Tapajit Dey, Chris Bogart, Sadika Amreen, Marat Valiev, Adam Tutko, David Kennard, Russell Zaretzki, and Audris Mockus. World of code: enabling a research workflow for mining and analyzing the universe of open source VCS data. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09905-9; http://link.springer.com/content/pdf/10.1007/s10664-020-09905-9.pdf.

Yates:2021:CCT

[1088] Rebecca Yates, Norah Power, and Jim Buckley. Correction to: Characterizing the transfer of program comprehension in onboarding: an information-push perspective. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09923-7; http://link.springer.com/content/pdf/10.1007/s10664-020-09923-7.pdf.

Ye:2021:APA

[1089] He Ye, Matias Martinez, and Martin Monperrus. Automated patch assessment for program repair at scale. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09920-w; http://link.springer.com/content/pdf/10.1007/s10664-020-09920-w.pdf.

Zerouali:2021:MDA

[1090] Ahmed Zerouali, Tom Mens, Alexandre Decan, Jesus Gonzalez-Barahona, and Gregorio Robles. A multi-dimensional analysis of technical lag in Debian-based Docker images. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09908-6; http://link.springer.com/content/pdf/10.1007/s10664-020-09908-6.pdf.

Pecorelli:2021:RTR

[1091] Fabiano Pecorelli, Fabio Palomba, and Andrea De Lucia. The relation of test–related factors to software quality: a case study on Apache sys-

tems. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09891-y; http://link.springer.com/content/pdf/10.1007/s10664-020-09891-y.pdf.

Gharibi:2021:AEE

[1092] Gharib Gharibi, Vijay Walunj, Raju Nekadi, Raj Marri, and Yugyung Lee. Automated end-to-end management of the modeling lifecycle in deep learning. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09894-9.

Liu:2021:ESI

[1093] Jiakun Liu, Qiao Huang, Xin Xia, Emad Shihab, David Lo, and Shanping Li. An exploratory study on the introduction and removal of different types of technical debt in deep learning frameworks. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09917-5.

Hoyos:2021:RFT

[1094] Juan Hoyos, Rabe Abdalkareem, Suhaib Mujahid, Emad Shihab, and Albeiro Espinosa Bedoya. On the removal of feature toggles. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09902-y.

Choetkiertikul:2021:ARC

[1095] Morakot Choetkiertikul, Hoa Khanh Dam, Truyen Tran, Trang Pham, Chaiyong Ragkhitwetsagul, and Aditya Ghose. Automatically recommending components for issue reports using deep learning. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09898-5.

Santos:2021:CRR

[1096] Adrian Santos, Sira Vegas, Markku Oivo, and Natalia Juristo. Comparing the results of replications in software engineering. *Empirical Software Engineering*, 26(2):??, March 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-020-09907-7.

Chinthanet:2021:LRA

[1097] Bodin Chinthanet, Raula Gaikovina Kula, Shane McIntosh, Takashi Ishio, Akinori Ihara, and Kenichi Matsumoto. Lags in the release, adoption, and propagation of npm vulnerability fixes. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL http://link.springer.com/article/10.1007/s10664-021-09951-x; http://link.springer.com/content/pdf/10.1007/s10664-021-09951-x.pdf.

Riom:2021:RVA

[1098] Timothé Riom, Arthur Sawadogo, Kevin Allix, Tegawendé F. Bissyandé, Naouel Moha, and Jacques Klein. Revisiting the VCCFinder approach for the identification of vulnerability-contributing commits. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-021-09944-w; http://link.springer.com/content/pdf/10.1007/s10664-021-09944-w.pdf`.

Soto-Valero:2021:CSB

[1099] César Soto-Valero, Nicolas Harrand, Martin Monperrus, and Benoit Baudry. A comprehensive study of bloated dependencies in the Maven ecosystem. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09914-8; http://link.springer.com/content/pdf/10.1007/s10664-020-09914-8.pdf`.

Cashman:2021:EIO

[1100] Mikaela Cashman, Justin Firestone, Myra B. Cohen, Thammasak Thianniwet, and Wei Niu. An empirical investigation of organic software product lines. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-021-09940-0; http://link.springer.com/content/pdf/10.1007/s10664-021-09940-0.pdf`.

Sleimi:2021:AFE

[1101] Amin Sleimi, Nicolas Sannier, Mehrdad Sabetzadeh, Lionel Briand, Marcello Ceci, and John Dann. An automated framework for the extraction of semantic legal metadata from legal texts. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09933-5`.

Santos:2021:FET

[1102] Adrian Santos, Sira Vegas, Oscar Dieste, Fernando Uyaguari, Ayşe Tosun, Davide Fucci, Burak Turhan, Giuseppe Scanniello, Simone Romano, Itir Karac, Marco Kuhrmann, Vladimir Mandić, Robert Ramač, Dietmar Pfahl, Christian Engblom, and et al. A family of experiments on test-driven development. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09895-8`.

Spiegler:2021:ESC

[1103] Simone V. Spiegler, Christoph Heinecke, and Stefan Wagner. An empirical study on changing leadership in agile teams. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-021-09949-5; http://link.springer.com/content/pdf/10.1007/s10664-021-09949-5.pdf`.

Liebel:2021:EIE

[1104] Grischa Liebel and Shalini Chakraborty. Ethical issues in empirical studies using student subjects: Re-visiting practices and perceptions. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-021-09958-4`.

Moraes:2021:OHM

[1105] João Pedro Moraes, Ivanilton Polato, Igor Wiese, Filipe Saraiva, and Gustavo Pinto. From one to hundreds: multi-licensing in the JavaScript ecosystem. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09936-2`.

Pereira:2021:GLS

[1106] Rui Pereira, Hugo Matalonga, Marco Couto, Fernando Castor, Bruno Cabral, Pedro Carvalho, Simão Melo de Sousa, and João Paulo Fernandes. GreenHub: a large-scale collaborative dataset to battery consumption analysis of Android devices. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09925-5`.

Anonymous:2021:AES

[1107] Anonymous. Appreciation to *Empirical Software Engineering* reviewers of 2020. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-021-09952-w`.

Hatamian:2021:PSA

[1108] Majid Hatamian, Samuel Wairimu, Nurul Momen, and Lothar Fritsch. A privacy and security analysis of early-deployed COVID-19 contact tracing Android apps. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09934-4; http://link.springer.com/content/pdf/10.1007/s10664-020-09934-4.pdf`.

Kim:2021:DIR

[1109] Misoo Kim and Eunseok Lee. Are datasets for information retrieval-based bug localization techniques trustworthy? *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-021-09946-8`.

Foundjem:2021:RSS

[1110] Armstrong Foundjem and Bram Adams. Release synchronization in software ecosystems. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09929-1`.

Maipradit:2021:CWI

[1111] Rungroj Maipradit, Christoph Treude, Hideaki Hata, and Kenichi Matsumoto. Correction to: Wait for it: identifying "On-Hold" self-admitted technical debt. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-021-09939-7`; `http://link.springer.com/content/pdf/10.1007/s10664-021-09939-7.pdf`. See [1043].

Macho:2021:NBC

[1112] Christian Macho, Stefanie Beyer, Shane McIntosh, and Martin Pinzger. The nature of build changes. *Empirical Software Engineering*, 26(3):??, May 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `http://link.springer.com/article/10.1007/s10664-020-09926-4`; `http://link.springer.com/content/pdf/10.1007/s10664-020-09926-4.pdf`.

Wang:2021:BVF

[1113] Liu Wang, Ren He, and Guoai Xu. Beyond the virus: a first look at coronavirus-themed Android malware. *Empirical Software Engineering*, 26 (4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09974-4`.

Zhou:2021:SBH

[1114] Jiayuan Zhou, Shaowei Wang, and Ahmed E. Hassan. Studying backers and hunters in bounty issue addressing process of open source projects. *Empirical Software Engineering*, 26 (4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09979-z`.

Daun:2021:RSR

[1115] Marian Daun, Jennifer Brings, and Viktoria Stenkova. Reliability of self-rated experience and confidence as predictors for students' performance in software engineering. *Empirical Software Engineering*, 26(4): ??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09972-6`.

Veizaga:2021:SBC

[1116] Alvaro Veizaga, Mauricio Alferez, and Lionel Briand. On systematically building a controlled natural language for functional requirements. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09956-6`.

Sorbo:2021:ECS

[1117] Andrea Di Sorbo and Sebastiano Panichella. Exposed! A case study on the vulnerability-proneness of Google Play Apps. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09978-0`.

Novielli:2021:ASS

[1118] Nicole Novielli, Fabio Calefato, and Alexander Serebrenik. Assessment of off-the-shelf SE-specific sentiment analysis tools: an extended replication study. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09960-w`.

Zhang:2021:RDB

[1119] Man Zhang, Bogdan Marculescu, and Andrea Arcuri. Resource and dependency based test case generation for RESTful Web services. *Empirical Software Engineering*, 26 (4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-020-09937-1`.

Gote:2021:ATS

[1120] Christoph Gote, Ingo Scholtes, and Frank Schweitzer. Analysing time-stamped co-editing networks in software development teams using `git2net`. *Empirical Software Engineering*, 26 (4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-020-09928-2`.

Daoudi:2021:LLR

[1121] Nadia Daoudi, Kevin Allix, and Jacques Klein. Lessons learnt on reproducibility in machine learning based Android malware detection. *Empirical Software Engineering*, 26 (4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09955-7`.

Shrikanth:2021:APB

[1122] N. C. Shrikanth, William Nichols, and Tim Menzies. Assessing practitioner beliefs about software engineering. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09957-5`.

Duchien:2021:FSI

[1123] Laurence Duchien, Paul Grünbacher, and Thomas Thüm. Foreword to the special issue on configurable systems. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09964-6`.

Quach:2021:ESU

[1124] Sophia Quach, Maxime Lamothe, and Weiyi Shang. An empirical study on the use of SZZ for identifying inducing changes of non-functional bugs. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09970-8`.

Mohamad:2021:SAC

[1125] Mazen Mohamad, Jan-Philipp Steghöfer, and Riccardo Scandariato. Security assurance cases — state of

the art of an emerging approach. *Empirical Software Engineering*, 26 (4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09971-7`.

Rocco:2021:DRS

[1126] Juri Di Rocco, Davide Di Ruscio, and Riccardo Rubei. Development of recommendation systems for software engineering: the CROSSMINER experience. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09963-7`.

Tang:2021:USO

[1127] Henry Tang and Sarah Nadi. On using Stack Overflow comment-edit pairs to recommend code maintenance changes. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09954-8`.

Timperley:2021:UIA

[1128] Christopher S. Timperley, Lauren Herckis, and Michael Hilton. Understanding and improving artifact sharing in software engineering research. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09973-5`.

Wu:2021:GAT

[1129] Di Wu, Xiao-Yuan Jing, and Baowen Xu. Generating API tags for tutorial fragments from Stack Overflow. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09962-8`.

Pimentel:2021:UIQ

[1130] João Felipe Pimentel, Leonardo Murta, and Juliana Freire. Understanding and improving the quality and reproducibility of Jupyter notebooks. *Empirical Software Engineering*, 26 (4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09961-9`.

Tuarob:2021:ATR

[1131] Suppawong Tuarob, Noppadol Assavakamhaenghan, and Morakot Choetkiertikul. Automatic team recommendation for collaborative software development. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09966-4`.

Wang:2021:PCM

[1132] Yingying Wang, Harshavardhan Kadiyala, and Julia Rubin. Promises and challenges of microservices: an exploratory study. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-020-09910-y.

Russo:2021:PWB

[1133] Daniel Russo, Paul H. P. Hanel, and Niels van Berkel. Predictors of well-being and productivity among software professionals during the COVID-19 pandemic — a longitudinal study. *Empirical Software Engineering*, 26 (4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-09945-9.

Lyu:2021:EAD

[1134] Chen Lyu, Ruyun Wang, and Songlin Hu. Embedding API dependency graph for neural code generation. *Empirical Software Engineering*, 26 (4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-09968-2.

Qu:2021:ENE

[1135] Yu Qu and Heng Yin. Evaluating network embedding techniques' performances in software bug prediction. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-09965-5.

Prana:2021:SMH

[1136] Gede Artha Azriadi Prana, Abhishek Sharma, and David Lo. Out of sight, out of mind? How vulnerable dependencies affect open-source projects. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-09959-3.

Vescan:2021:GPF

[1137] Andreea Vescan, Adrian Pintea, and Alexander Egyed. Genetic programming for feature model synthesis: a replication study. *Empirical Software Engineering*, 26(4): ??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-09947-7.

Samhi:2021:FLA

[1138] Jordan Samhi, Kevin Allix, and Jacques Klein. A first look at Android applications in Google Play related to COVID-19. *Empirical Software Engineering*, 26(4):??, July 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-09943-x.

Vitui:2021:CMM

[1139] Arthur Vitui and Tse-Hsun (Peter) Chen. Correction to: MLASP: Machine learning assisted capacity planning. An industrial experience report. *Empirical Software Engineering*, 26 (5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10011-7.

Li:2021:RIM

[1140] Boyuan Li, Xiaoxu Diao, and Carol Smidts. A requirements inspection method based on scenarios generated by model mutation and the experimental validation. *Empirical Software Engineering*, 26(5): ??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10001-9`.

Garcia:2021:ADM

[1141] Boni García, Mario Munoz-Organero, and Carlos Delgado Kloos. Automated driver management for Selenium WebDriver. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09975-3`.

Tahir:2021:DCS

[1142] Amjed Tahir, Kwabena E. Bennin, and Stephen G. MacDonell. Does class size matter? An in-depth assessment of the effect of class size in software defect prediction. *Empirical Software Engineering*, 26(5): ??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09991-3`.

Olsson:2021:MAS

[1143] Jesper Olsson, Erik Risfelt, and Richard Torkar. Measuring affective states from technical debt. *Empirical Software Engineering*, 26(5): ??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09998-w`.

Bogner:2021:IPC

[1144] Justus Bogner, Jonas Fritzsch, and Alfred Zimmermann. Industry practices and challenges for the evolvability assurance of microservices. *Empirical Software Engineering*, 26(5): ??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09999-9`.

Ernst:2021:UPR

[1145] Neil A. Ernst, Jeffrey C. Carver, and Marco Torchiano. Understanding peer review of software engineering papers. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10005-5`.

Rodriguez-Perez:2021:PDS

[1146] Gema Rodríguez-Pérez, Reza Nadri, and Meiyappan Nagappan. Perceived diversity in software engineering: a systematic literature review. *Empirical Software Engineering*, 26(5): ??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09992-2`.

Moe:2021:FSS

[1147] Nils Brede Moe, Darja Šmite, and Casper Lassenius. Finding the

sweet spot for organizational control and team autonomy in large-scale agile software development. *Empirical Software Engineering*, 26(5): ??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09967-3`.

Kim:2021:SLT

[1148] Dong Jae Kim, Tse-Hsun (Peter) Chen, and Jinqiu Yang. The secret life of test smells — an empirical study on test smell evolution and maintenance. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09969-1`.

Aleti:2021:AME

[1149] Aldeida Aleti and Matias Martinez. E-APR: Mapping the effectiveness of automated program repair techniques. *Empirical Software Engineering*, 26 (5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09989-x`.

Pellegrin:2021:TES

[1150] Florian Pellegrin, Zeynep Yücel, and Pattara Leelaprute. Task estimation for software company employees based on computer interaction logs. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10006-4`.

Quach:2021:EIF

[1151] Sophia Quach, Maxime Lamothe, and Weiyi Shang. Evaluating the impact of falsely detected performance bug-inducing changes in JIT models. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10004-6`.

Wang:2021:USL

[1152] Dong Wang, Tao Xiao, and Kenichi Matsumoto. Understanding shared links and their intentions to meet information needs in modern code review: a case study of the OpenStack and Qt projects. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09997-x`.

Haakman:2021:ALM

[1153] Mark Haakman, Luís Cruz, and Arie van Deursen. AI lifecycle models need to be revised. *Empirical Software Engineering*, 26(5): ??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09993-1`.

Assi:2021:FFC

[1154] Maram Assi, Safwat Hassan, and Ying Zou. `FeatCompare`: Feature comparison for competing mobile apps leveraging user reviews. *Empirical Software Engineering*, 26(5):

??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09988-y`.

Izadi:2021:TRS

[1155] Maliheh Izadi, Abbas Heydarnoori, and Georgios Gousios. Topic recommendation for software repositories using multi-label classification algorithms. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09976-2`.

daCosta:2021:ERD

[1156] José Aldo Silva da Costa, Rohit Gheyi, and Alessandro Garcia. Evaluating refactorings for disciplining `#ifdef` annotations: an eye tracking study with novices. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10002-8`.

Nguyen-Duc:2021:ELS

[1157] Anh Nguyen-Duc, Kai-Kristian Kemell, and Pekka Abrahamsson. The entrepreneurial logic of startup software development: a study of 40 software startups. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09987-z`.

UlHaq:2021:COT

[1158] Fitash Ul Haq, Donghwan Shin, and Lionel Briand. Can offline testing of deep neural networks replace their online testing? *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09982-4`. See correction [1321].

Cogo:2021:ESS

[1159] Filipe R. Cogo, Gustavo A. Oliva, and Ahmed E. Hassan. An empirical study of same-day releases of popular packages in the npm ecosystem. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09980-6`.

Kuutila:2021:IDL

[1160] Miikka Kuutila, Mika Mäntylä, and Bram Adams. Individual differences limit predicting well-being and productivity using software repositories: a longitudinal industrial study. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09977-1`.

Vitui:2021:MML

[1161] Arthur Vitui and Tse-Hsun (Peter) Chen. MLASP: Machine learning assisted capacity planning. *Empirical Software Engineering*, 26(5):

??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-09994-0.

Ulan:2021:WSM

[1162] Maria Ulan, Welf Löwe, and Anna Wingkvist. Weighted software metrics aggregation and its application to defect prediction. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-09984-2.

Lima:2021:AEH

[1163] Luan P. Lima, Lincoln S. Rocha, and Matheus Paixao. Assessing exception handling testing practices in open-source libraries. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-09983-3.

Tian:2021:WED

[1164] Yongqiang Tian, Shiqing Ma, and Xiangyu Zhang. To what extent do DNN-based image classification models make unreliable inferences? *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-09985-1.

Cheers:2021:ERS

[1165] Hayden Cheers, Yuqing Lin, and Shamus P. Smith. Evaluating the robustness of source code plagiarism detection tools to pervasive plagiarism-hiding modifications. *Empirical Software Engineering*, 26(5):??, September 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-09990-4.

Petrulio:2021:ILJ

[1166] Fernando Petrulio, Anand Ashok Sawant, and Alberto Bacchelli. The indolent lambdification of Java. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10039-9.

Laaber:2021:ATC

[1167] Christoph Laaber, Harald C. Gall, and Philipp Leitner. Applying test case prioritization to software microbenchmarks. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10037-x.

Nugroho:2021:HPS

[1168] Yusuf Sulistyo Nugroho, Syful Islam, and Kenichi Matsumoto. How are project-specific forums utilized? A study of participation, content, and sentiment in the Eclipse ecosystem. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN

ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10032-2.

Zampetti:2021:SAT

[1169] Fiorella Zampetti, Gianmarco Fucci, and Massimiliano Di Penta. Self-admitted technical debt practices: a comparison between industry and open-source. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10031-3.

Aranega:2021:RGT

[1170] Vincent Aranega, Julien Delplanque, and Guillermo Polito. Rotten green tests in Java, Pharo and Python. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10016-2.

Hasan:2021:UBS

[1171] Masum Hasan, Anindya Iqbal, and Amiangshu Bosu. Using a balanced scorecard to identify opportunities to improve code review effectiveness: an industrial experience report. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10038-w.

Ibrahim:2021:SHD

[1172] Md Hasan Ibrahim, Mohammed Sayagh, and Ahmed E. Hassan. A study of how Docker Compose is used to compose multi-component systems. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10025-1.

Reis:2021:FVP

[1173] Sofia Reis, Rui Abreu, and Luis Cruz. Fixing vulnerabilities potentially hinders maintainability. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10019-z.

Zamani:2021:PAH

[1174] Shayan Zamani and Hadi Hemmati. A pragmatic approach for hyper-parameter tuning in search-based test case generation. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10024-2.

Brito:2021:CRG

[1175] Aline Brito, Andre Hora, and Marco Tulio Valente. Characterizing refactoring graphs in Java and JavaScript projects. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10023-3.

Yang:2021:SSS

[1176] Nan Yang, Pieter Cuijpers, and Alexander Serebrenik. Single-state state machines in model-driven software engineering: an exploratory study. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10015-3.

Arizon-Peretz:2021:UDP

[1177] Renana Arizon-Peretz, Irit Hadar, and Sofia Sherman. Understanding developers' privacy and security mindsets via climate theory. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-09995-z.

Yang:2021:WWR

[1178] Deheng Yang, Kui Liu, and Tegawendé F. Bissyandé. Where were the repair ingredients for Defects4j bugs? *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10003-7.

Uddin:2021:ESI

[1179] Gias Uddin, Fatima Sabir, and Foutse Khomh. An empirical study of IoT topics in IoT developer discussions on Stack Overflow. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10021-5.

Silva:2021:TMS

[1180] Camila Costa Silva, Matthias Galster, and Fabian Gilson. Topic modeling in software engineering research. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10026-0.

Liu:2021:HCP

[1181] Haoran Liu, Yue Yu, and Xiangke Liao. How to cherry pick the bug report for better summarization? *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10008-2.

Zhou:2021:WWH

[1182] Cheng Zhou, Bin Li, and Lili Bo. Why and what happened? Aiding bug comprehension with automated category and causal link identification. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10010-8.

Chen:2021:MRC

[1183] Jiachi Chen, Xin Xia, and Xiaohu Yang. Maintenance-related concerns for post-deployed Ethereum smart contract development: issues, techniques, and future challenges. *Empirical Software Engineering*, 26(6): ??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10018-0`.

Rahman:2021:FRS

[1184] Mohammad Masudur Rahman, Foutse Khomh, and Chanchal K. Roy. The forgotten role of search queries in IR-based bug localization: an empirical study. *Empirical Software Engineering*, 26(6):??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10022-4`.

Kamienski:2021:ESQ

[1185] Arthur Kamienski and Cor-Paul Bezemer. An empirical study of Q&A websites for game developers. *Empirical Software Engineering*, 26(6): ??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10014-4`.

Laaber:2021:PUS

[1186] Christoph Laaber, Mikael Basmaci, and Pasquale Salza. Predicting unstable software benchmarks using static source code features. *Empirical Software Engineering*, 26(6): ??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09996-y`.

Revoredo:2021:SPR

[1187] Kate Revoredo, Djordje Djurica, and Jan Mendling. A study into the practice of reporting software engineering experiments. *Empirical Software Engineering*, 26(6): ??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10007-3`.

Rani:2021:WDC

[1188] Pooja Rani, Sebastiano Panichella, and Oscar Nierstrasz. What do class comments tell us? An investigation of comment evolution and practices in Pharo Smalltalk. *Empirical Software Engineering*, 26(6): ??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09981-5`.

Berry:2021:EET

[1189] Daniel M. Berry. Empirical evaluation of tools for hairy requirements engineering tasks. *Empirical Software Engineering*, 26(6): ??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-09986-0`.

Abid:2021:FAU

[1190] Shamsa Abid, Shafay Shamail, and Sarah Nadi. FACER: an API usage-based code-example recommender for opportunistic reuse. *Empirical Software Engineering*, 26(6): ??, November 2021. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10000-w`.

Zampetti:2022:UCR

[1191] Fiorella Zampetti, Saghan Mudbhari, and Giuliano Antoniol. Using code reviews to automatically configure static analysis tools. *Empirical Software Engineering*, 27(1): ??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10076-4`.

Croft:2022:ESD

[1192] Roland Croft, Yongzheng Xie, and Christoph Treude. An empirical study of developers' discussions about security challenges of different programming languages. *Empirical Software Engineering*, 27(1): ??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10054-w`.

Shu:2022:OAE

[1193] Rui Shu, Tianpei Xia, and Tim Menzies. Omni: automated ensemble with unexpected models against adversarial evasion attack. *Empirical Software Engineering*, 27(1): ??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10064-8`.

Li:2022:EYO

[1194] Bowen Li, Xin Peng, and Xuanzhe Liu. Enjoy your observability: an industrial survey of microservice tracing and analysis. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10063-9`.

Zhou:2022:SDT

[1195] Jiayuan Zhou, Shaowei Wang, and Naoyasu Ubayashi. Studying donations and their expenses in open source projects: a case study of GitHub projects collecting donations through open collectives. *Empirical Software Engineering*, 27(1): ??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10060-y`.

Li:2022:RLR

[1196] Yi Li, Shaohua Wang, and Xinyue Ye. Rap4DQ: Learning to recommend relevant API documentation for developer questions. *Empirical Software Engineering*, 27(1): ??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10067-5`.

Escobar-Velasquez:2022:SEC

[1197] Camilo Escobar-Velásquez, Alejandro Mazuera-Rozo, and Gabriele Bavota. Studying eventual connectivity issues in Android apps. *Empirical Software Engineering*, 27(1): ??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10020-6`.

Wang:2022:DRE

[1198] Peipei Wang, Chris Brown, and Kathryn T. Stolee. Demystifying regular expression bugs. *Empirical Software Engineering*, 27(1): ??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10033-1`.

Marques:2022:ISF

[1199] Henrique Marques, Nuno Laranjeiro, and Jorge Bernardino. Injecting software faults in Python applications. *Empirical Software Engineering*, 27 (1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10047-9`.

Liu:2022:ESR

[1200] Jiakun Liu, Haoxiang Zhang, and Shanping Li. An exploratory study on the repeatedly shared external links on Stack Overflow. *Empirical Software Engineering*, 27(1): ??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10028-y`.

Izquierdo:2022:ANC

[1201] Javier Luis Cánovas Izquierdo and Jordi Cabot. On the analysis of non-coding roles in open source development. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10061-x`.

Gold:2022:EMS

[1202] Nicolas E. Gold and Jens Krinke. Ethics in the mining of software repositories. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10057-7`.

Luo:2022:TAR

[1203] Linghui Luo, Felix Pauck, and Fabio Massacci. `TaintBench`: Automatic real-world malware benchmarking of Android taint analyses. *Empirical Software Engineering*, 27(1): ??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10013-5`.

Chen:2022:MTD

[1204] Chi Chen, Xin Peng, and Wenyun Zhao. "More than deep learning": post-processing for API sequence recommendation. *Empirical Software Engineering*, 27(1):

??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10040-2.

Wen:2022:QRC

[1205] Fengcai Wen, Csaba Nagy, and Gabriele Bavota. Quick remedy commits and their impact on mining software repositories. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10051-z.

Eisty:2022:DPP

[1206] Nasir U. Eisty and Jeffrey C. Carver. Developers perception of peer code review in research software development. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10053-x.

Siegmund:2022:CPS

[1207] Janet Siegmund and Chanchal K. Roy. Correction to: Preface to the special issue on program comprehension. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10030-4. See [1002].

Peruma:2022:HDR

[1208] Anthony Peruma, Steven Simmons, and Ali Ouni. How do I refactor this? An empirical study on refactoring trends and topics in Stack Overflow. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10045-x.

terBeek:2022:ESA

[1209] Maurice H. ter Beek, Ferruccio Damiani, and Luca Paolini. Efficient static analysis and verification of featured transition systems. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-020-09930-8.

Mahadi:2022:CSN

[1210] Alvi Mahadi, Neil A. Ernst, and Karan Tongay. Conclusion stability for natural language based mining of design discussions. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10009-1.

Wijerathna:2022:MRD

[1211] Laksri Wijerathna, Aldeida Aleti, and Antony Tang. Mining and relating design contexts and design patterns from Stack Overflow. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10034-0.

Huang:2022:RRP

[1212] Yuan Huang, Xingjian Liang, and Xiaocong Zhou. Reviewing rounds prediction for code patches. *Empirical Software Engineering*, 27(1): ??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10035-z`.

Basili:2022:RES

[1213] Victor Basili and Lionel Briand. Reflections on the *Empirical Software Engineering* journal. *Empirical Software Engineering*, 27(1): ??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10055-9`.

Lin:2022:IRV

[1214] Jinfeng Lin, Yalin Liu, and Jane Cleland-Huang. Information retrieval versus deep learning approaches for generating traceability links in bilingual projects. *Empirical Software Engineering*, 27(1): ??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10050-0`.

Asad:2022:DAD

[1215] Hafizul Asad and Ilir Gashi. Dynamical analysis of diversity in rule-based open source network intrusion detection systems. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10046-w`.

Hata:2022:GDE

[1216] Hideaki Hata, Nicole Novielli, and Christoph Treude. GitHub discussions: an exploratory study of early adoption. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10058-6`.

Sonnekalb:2022:DSA

[1217] Tim Sonnekalb, Thomas S. Heinze, and Patrick Mäder. Deep security analysis of program code. *Empirical Software Engineering*, 27(1): ??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10029-x`.

Przybylek:2022:GBS

[1218] Adam Przybyłek, Marta Albecka, and Wojciech Kowalski. Game-based Sprint retrospectives: multiple action research. *Empirical Software Engineering*, 27(1):??, January 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10043-z`.

Ali:2022:PVS

[1219] Sikandar Ali, Irshad Ahmed Abbasi, and Jiwei Huang. Practitioner's view of the success factors for software outsourcing partnership formation: an empirical exploration.

Empirical Software Engineering, 27 (2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10044-y`.

Assuncao:2022:AMO

[1220] Wesley K. G. Assunção, Thelma Elita Colanzi, and Carlos Lucena. Analysis of a many-objective optimization approach for identifying microservices from legacy systems. *Empirical Software Engineering*, 27(2): ??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10049-7`.

Izadi:2022:POP

[1221] Maliheh Izadi, Kiana Akbari, and Abbas Heydarnoori. Predicting the objective and priority of issue reports in software repositories. *Empirical Software Engineering*, 27(2): ??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10085-3`.

Azuma:2022:ESS

[1222] Hideaki Azuma, Shinsuke Matsumoto, and Shinji Kusumoto. An empirical study on self-admitted technical debt in Dockerfiles. *Empirical Software Engineering*, 27(2): ??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10081-7`.

Yang:2022:MPF

[1223] Yilin Yang, Tianxing He, and Baowen Xu. Mining Python fix patterns via analyzing fine-grained source code changes. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10087-1`.

Li:2022:ESE

[1224] Wei Li, Qingan Li, and Mengting Yuan. An empirical study of the effectiveness of IR-based bug localization for large-scale industrial projects. *Empirical Software Engineering*, 27 (2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10082-6`.

Amasaki:2022:ESA

[1225] Sousuke Amasaki, Hirohisa Aman, and Tomoyuki Yokogawa. An extended study on applicability and performance of homogeneous cross-project defect prediction approaches under homogeneous cross-company effort estimation situation. *Empirical Software Engineering*, 27(2): ??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10103-4`.

Herbold:2022:STM

[1226] Steffen Herbold and Tobias Haar. Smoke testing for machine learning: simple tests to discover severe bugs. *Empirical Software Engineering*, 27

(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10073-7.

Heradio:2022:USS

[1227] Ruben Heradio, David Fernandez-Amoros, and Don Batory. Uniform and scalable sampling of highly configurable systems. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10102-5.

Dabrowski:2022:AAR

[1228] Jacek Dąbrowski, Emmanuel Letier, and Angelo Susi. Analysing app reviews for software engineering: a systematic literature review. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10065-7.

Herbold:2022:PSF

[1229] Steffen Herbold, Alexander Trautsch, and Benjamin Ledel. Problems with SZZ and features: an empirical study of the state of practice of defect prediction data collection. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10092-4.

Gao:2022:PFU

[1230] Hui Gao, Hongyu Kuang, and Alexander Egyed. Propagating frugal user feedback through closeness of code dependencies to improve IR-based traceability recovery. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10091-5.

Parra:2022:CSA

[1231] Esteban Parra, Mohammad Alahmadi, and Sonia Haiduc. A comparative study and analysis of developer communications on Slack and Gitter. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10095-1.

Camilli:2022:MPM

[1232] Matteo Camilli and Barbara Russo. Modeling performance of microservices systems with growth theory. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10088-0.

Almulla:2022:LHS

[1233] Hussein Almulla and Gregory Gay. Learning how to search: generating effective test cases through adaptive fitness function selection. *Empirical Software Engineering*, 27(2):

??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10048-8.

Xiao:2022:PCA

[1234] Da Xiao, Dengji Hang, and Hongliang Liang. Path context augmented statement and network for learning programs. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10098-y.

Bjarnason:2022:ITC

[1235] Elizabeth Bjarnason, Baldvin Gislason Bern, and Linda Svedberg. Interteam communication in large-scale colocated software engineering: a case study. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10027-z.

Stol:2022:GSE

[1236] Klaas-Jan Stol, Mario Schaarschmidt, and Shelly Goldblit. Gamification in software engineering: the mediating role of developer engagement and job satisfaction. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10062-w.

Noei:2022:SGU

[1237] Ehsan Noei and Kelly Lyons. A study of gender in user reviews on the Google Play Store. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10080-8.

Hanenberg:2022:TST

[1238] Stefan Hanenberg and Nils Mehlhorn. Two N-of-1 self-trials on readability differences between anonymous inner classes (AICs) and lambda expressions (LEs) on Java code snippets. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10077-3.

Hu:2022:CIC

[1239] Linghuan Hu, W. Eric Wong, and Shuo Li. CT-IoT: a combinatorial testing-based path selection framework for effective IoT testing. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10017-1.

Pecorelli:2022:STA

[1240] Fabiano Pecorelli, Gemma Catolino, and Fabio Palomba. Software testing and Android applications: a large-scale empirical study. *Empirical Software Engineering*, 27(2):

??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10059-5.

Schroder:2022:EIC

[1241] Michael Schröder and Jürgen Cito. An empirical investigation of command-line customization. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10036-y.

Pan:2022:TCS

[1242] Rongqi Pan, Mojtaba Bagherzadeh, and Lionel Briand. Test case selection and prioritization using machine learning: a systematic literature review. *Empirical Software Engineering*, 27(2):??, March 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10066-6.

Perera:2022:SBF

[1243] Anjana Perera, Aldeida Aleti, and Katie Walker. Search-based fairness testing for regression-based machine learning systems. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10116-7.

Soares:2022:ECI

[1244] Eliezio Soares, Gustavo Sizilio, and Uirá Kulesza. The effects of continuous integration on software development: a systematic literature review. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10114-1.

Cetin:2022:ADC

[1245] H. Alperen Çetin and Eray Tüzün. Analyzing developer contributions using artifact traceability graphs. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10129-2.

Calefato:2022:WYC

[1246] Fabio Calefato, Marco Aurélio Gerosa, and Igor Steinmacher. Will you come back to contribute? Investigating the inactivity of OSS core developers in GitHub. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10012-6.

Diaz:2022:VCE

[1247] Oscar Díaz, Leticia Montalvillo, and Thomas Fogdal. Visualizing the customization endeavor in product-based-evolving software product lines: a case of action design research. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10101-6.

Traini:2022:EPA

[1248] Luca Traini. Exploring performance assurance practices and challenges in agile software development: an ethnographic study. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10069-3`.

Haryono:2022:AAA

[1249] Stefanus A. Haryono, Ferdian Thung, and Gilles Muller. AndroEvolve: automated Android API update with data flow analysis and variable denormalization. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10096-0`.

Mahmood:2022:EVM

[1250] Wardah Mahmood, Daniel Strüber, and Thorsten Berger. Effects of variability in models: a family of experiments. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10112-3`.

Russo:2022:AER

[1251] Daniel Russo, Andres R. Masegosa, and Klaas-Jan Stol. From anecdote to evidence: the relationship between personality and need for cognition of developers. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10106-1`.

Karakatic:2022:SSC

[1252] Sašo Karakatič, Aleksej Miloševič, and Tjaša Heričko. Software system comparison with semantic source code embeddings. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10122-9`.

PereiradosReis:2022:CPS

[1253] José Pereira dos Reis, Fernando Brito e Abreu, and Glauco de Figueiredo Carneiro. Crowdsmelling: a preliminary study on using collective knowledge in code smells detection. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10110-5`.

Kroher:2022:ISP

[1254] Christian Kröher, Moritz Flöter, and Klaus Schmid. Incremental software product line verification — a performance analysis with dead variable code. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10090-6`.

White:2022:TET

[1255] Robert White and Jens Krinke. TCTracer: Establishing test-to-code traceability links using dynamic and static

techniques. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10079-1`.

Gezici:2022:SLR

[1256] Bahar Gezici and Ayça Kolukısa Tarhan. Systematic literature review on software quality for AI-based software. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10105-2`.

Maes-Bermejo:2022:RBP

[1257] Michel Maes-Bermejo, Micael Gallego, and Jesus M. Gonzalez-Barahona. Revisiting the building of past snapshots — a replication and reproduction study. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10117-6`.

Pecorelli:2022:ASA

[1258] Fabiano Pecorelli, Savanna Lujan, and Andrea De Lucia. On the adequacy of static analysis warnings with respect to code smell prediction. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10126-5`.

Ding:2022:CPT

[1259] Zishuo Ding, Heng Li, and Tse-Hsun Peter Chen. Can pre-trained code embeddings improve model performance? Revisiting the use of code embeddings in software engineering tasks. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10118-5`.

Mondal:2022:RPR

[1260] Saikat Mondal, Mohammad Masudur Rahman, and Kevin Schneider. The reproducibility of programming-related issues in Stack Overflow questions. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10113-2`.

Ochoa:2022:BBS

[1261] Lina Ochoa, Thomas Degueule, and Jurgen Vinju. Breaking bad? Semantic versioning and impact of breaking changes in Maven Central. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10052-y`.

Majumder:2022:RPV

[1262] Suvodeep Majumder, Pranav Mody, and Tim Menzies. Revisiting process versus product metrics: a large scale analysis. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN

ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10068-4.

Rahman:2022:WSD

[1263] Md Rayhanur Rahman, Nasif Imtiaz, and Laurie Williams. Why secret detection tools are not enough: It's not just about false positives — an industrial case study. *Empirical Software Engineering*, 27(3):??, May 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10109-y.

Cazzola:2022:CTR

[1264] Walter Cazzola and Luca Favalli. Correction to: Towards a recipe for language decomposition: quality assessment of language product lines. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10174-x.

Goncalves:2022:DER

[1265] Pavlína Wurzel Gonçalves, Enrico Fregnan, and Alberto Bacchelli. Do explicit review strategies improve code review performance? Towards understanding the role of cognitive load. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10123-8.

Penzenstadler:2022:TDB

[1266] Birgit Penzenstadler, Richard Torkar, and Cristina Martinez Montes. Take a deep breath: Benefits of neuroplasticity practices for software developers and computer workers in a family of experiments. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10148-z.

Ginelli:2022:CSC

[1267] Davide Ginelli, Matias Martinez, and Martin Monperrus. A comprehensive study of code-removal patches in automated program repair. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10100-7.

Brandt:2022:DCT

[1268] Carolin Brandt and Andy Zaidman. Developer-centric test amplification. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10094-2.

Ocariza:2022:EBP

[1269] Frolin S. Ocariza, Jr. On the effectiveness of bisection in performance regression localization. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10152-3.

Baltes:2022:SSE

[1270] Sebastian Baltes and Paul Ralph. Sampling in software engineering research: a critical review and guidelines. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10072-8.

Shetty:2022:SMK

[1271] Manish Shetty, Chetan Bansal, and Nachiappan Nagappan. SoftNER: Mining knowledge graphs from cloud incidents. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10159-w.

Tagra:2022:RRB

[1272] Ankur Tagra, Haoxiang Zhang, and Ahmed E. Hassan. Revisiting reopened bugs in open source software systems. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10133-6.

Liu:2022:UMT

[1273] Fang Liu, Ge Li, and Zhi Jin. A unified multi-task learning model for AST-level and token-level code completion. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10140-7.

Huang:2022:CUU

[1274] Kaifeng Huang, Bihuan Chen, and Yang Liu. Characterizing usages, updates and risks of third-party libraries in Java projects. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10131-8.

Fregnan:2022:WHM

[1275] Enrico Fregnan, Fernando Petrulio, and Alberto Bacchelli. What happens in my code reviews? An investigation on automatically classifying review changes. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10075-5.

Meloca:2022:CSA

[1276] Rômulo Meloca and Ingrid Nunes. A comparative study of application-level caching recommendations at the method level. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10089-z.

Shin:2022:PSM

[1277] Donghwan Shin, Domenico Bianculli, and Lionel Briand. PRINS: scalable

model inference for component-based system logs. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10111-4`.

Sas:2022:EIA

[1278] Darius Sas, Paris Avgeriou, and Umut Uyumaz. On the evolution and impact of architectural smells — an industrial case study. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10132-7`.

Moreira:2022:OSS

[1279] Rodrigo André Ferreira Moreira, Wesley K. G. Assunção, and Eduardo Figueiredo. Open-source software product line extraction processes: the ArgoUML-SPL and Phaser cases. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10104-3`.

Jebnoun:2022:CDL

[1280] Hadhemi Jebnoun, Md Saidur Rahman, and Biruk Asmare Muse. Clones in deep learning code: what, where, and why? *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10099-x`.

Zhang:2022:SLP

[1281] Haonan Zhang, Yiming Tang, and Weiyi Shang. Studying logging practice in test code. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10139-0`.

Cazzola:2022:TRL

[1282] Walter Cazzola and Luca Favalli. Towards a recipe for language decomposition: quality assessment of language product lines. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10074-6`.

Saidani:2022:TBU

[1283] Islem Saidani, Ali Ouni, and Ahmed E. Hassan. Tracking bad updates in mobile apps: a search-based approach. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10125-6`.

Tu:2022:DML

[1284] Huy Tu and Tim Menzies. DebtFree: minimizing labeling cost in self-admitted technical debt identification using semi-supervised learning. *Empirical Software Engineering*, 27(4):??, July 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10121-w`.

Walunj:2022:DPU

[1285] Vijay Walunj, Gharib Gharibi, and Yugyung Lee. Defect prediction using deep learning with network portrait divergence for software evolution. *Empirical Software Engineering*, 27(5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10147-0`.

Uddin:2022:QSD

[1286] Gias Uddin, Omar Alam, and Alexander Serebrenik. A qualitative study of developers' discussions of their problems and joys during the early COVID-19 months. *Empirical Software Engineering*, 27(5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10156-z`.

Abidi:2022:MLD

[1287] Mouna Abidi, Md Saidur Rahman, and Foutse Khomh. Multi-language design smells: a backstage perspective. *Empirical Software Engineering*, 27(5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10161-2`.

Lopes:2022:HWW

[1288] Mateus Lopes and Andre Hora. How and why we end up with complex methods: a multi-language study. *Empirical Software Engineering*, 27(5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10144-3`.

Ojdanic:2022:UCR

[1289] Miloš Ojdanić, Wei Ma, and Mike Papadakis. On the use of commit-relevant mutants. *Empirical Software Engineering*, 27(5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10138-1`.

Callan:2022:HDA

[1290] James Callan, Oliver Krauss, and Federica Sarro. How do Android developers improve non-functional properties of software? *Empirical Software Engineering*, 27(5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10137-2`.

Michelon:2022:ESS

[1291] Gabriela Karoline Michelon, David Obermann, and Alexander Egyed. Evolving software system families in space and time with feature revisions. *Empirical Software Engineering*, 27(5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10108-z`.

Rahman:2022:WMC

[1292] Mohammad M. Rahman, Foutse Khomh, and Marco Castelluccio. Works for me! Cannot reproduce — a large scale empirical study

of non-reproducible bugs. *Empirical Software Engineering*, 27(5): ??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10153-2`.

Mariani:2022:GRA

[1293] Thainá Mariani, Marouane Kessentini, and Silvia Regina Vergilio. Generation of refactoring algorithms by grammatical evolution. *Empirical Software Engineering*, 27(5): ??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10151-4`.

Rehman:2022:NOC

[1294] Ifraz Rehman, Dong Wang, and Kenichi Matsumoto. Newcomer OSS-candidates: Characterizing contributions of novice developers to GitHub. *Empirical Software Engineering*, 27 (5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10163-0`.

Wessel:2022:QGI

[1295] Mairieli Wessel, Alexander Serebrenik, and Marco A. Gerosa. Quality gatekeepers: investigating the effects of code review bots on pull request activities. *Empirical Software Engineering*, 27(5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10130-9`.

Zerouali:2022:ISV

[1296] Ahmed Zerouali, Tom Mens, and Coen De Roover. On the impact of security vulnerabilities in the npm and RubyGems dependency networks. *Empirical Software Engineering*, 27(5): ??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10154-1`.

Springer:2022:COS

[1297] Olga Springer and Jakub Miler. A comprehensive overview of software product management challenges. *Empirical Software Engineering*, 27(5): ??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10134-5`.

Alves:2022:SSS

[1298] Leonardo Fuchs Alves, Francisco J. S. Vasconcellos, and Bruno Magalhães Nogueira. SeSG: a search string generator for Secondary Studies with hybrid search strategies using text mining. *Empirical Software Engineering*, 27(5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10084-4`.

Piskachev:2022:FST

[1299] Goran Piskachev, Johannes Späth, and Eric Bodden. Fluently specifying taint-flow queries with *fluent* TQL. *Empirical Software Engineering*, 27(5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10165-y`.

Alegroth:2022:PBP

[1300] Emil Alégroth, Kristian Karl, and Nils Olsson. Practitioners' best practices to adopt, use or abandon model-based testing with graphical models for software-intensive systems. *Empirical Software Engineering*, 27(5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10145-2`.

Hejderup:2022:PPB

[1301] Joseph Hejderup, Moritz Beller, and Georgios Gousios. Präzi: from package-based to call-based dependency networks. *Empirical Software Engineering*, 27(5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10071-9`.

Ananieva:2022:CMU

[1302] Sofia Ananieva, Sandra Greiner, and Ralf Reussner. A conceptual model for unifying variability in space and time: Rationale, validation, and illustrative applications. *Empirical Software Engineering*, 27(5):??, September 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10097-z`.

Hoppner:2022:ADD

[1303] Stefan Höppner, Yves Haas, Matthias Tichy, and Katharina Juhnke. Advantages and disadvantages of (dedicated) model transformation languages. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10194-7`. See correction [1405].

Chowdhury:2022:RDC

[1304] Shaiful Chowdhury, Reid Holmes, Andy Zaidman, and Rick Kazman. Revisiting the debate: Are code metrics useful for measuring maintenance effort? *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10193-8`.

Klotins:2022:TCB

[1305] Eriks Klotins, Tony Gorschek, Katarina Sundelin, and Erik Falk. Towards cost-benefit evaluation for continuous software engineering activities. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10191-w`.

Pasuksmit:2022:SPC

[1306] Jirat Pasuksmit, Patanamon Thongtanunam, and Shanika Karunasekera. Story points changes in agile iterative development. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https:`

//link.springer.com/article/10.1007/s10664-022-10192-9.

Bokhari:2022:HDE

[1307] Mahmoud A. Bokhari and Bradley Alexander. A hybrid distributed EA approach for energy optimisation on smartphones. *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10188-5.

Elder:2022:DRN

[1308] Sarah Elder, Nusrat Zahan, Rui Shu, Monica Metro, Valeri Kozarev, Tim Menzies, and Laurie Williams. Do I really need all this work to find vulnerabilities? *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10179-6.

Patel:2022:SLL

[1309] Keyur Patel, João Faccin, Abdelwahab Hamou-Lhadj, and Ingrid Nunes. The sense of logging in the Linux kernel. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10136-3.

Carka:2022:EAM

[1310] Jonida Çarka, Matteo Esposito, and Davide Falessi. On effort-aware metrics for defect prediction. *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10186-7.

Sawadogo:2022:SLC

[1311] Arthur D. Sawadogo, Tegawendé F. Bissyandé, Naouel Moha, Kevin Allix, Jacques Klein, Li Li, and Yves Le Traon. SSPCatcher: Learning to catch security patches. *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10168-9.

Horvath:2022:UCK

[1312] Ferenc Horváth, Árpád Beszédes, Béla Vancsics, Gergo″ Balogh, László Vidács, and Tibor Gyimóthy. Using contextual knowledge in interactive fault localization. *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10190-x.

Loriot:2022:SLF

[1313] Benjamin Loriot, Fernanda Madeiral, and Martin Monperrus. Styler: learning formatting conventions to repair Checkstyle violations. *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-021-10107-0.

Zhu:2022:ESQ

[1314] Wenhan Zhu, Haoxiang Zhang, Ahmed E. Hassan, and Michael W. Godfrey. An empirical study of question discussions on Stack Overflow. *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10180-z`.

Widyasari:2022:RWP

[1315] Ratnadira Widyasari, Gede Artha Azriadi Prana, Stefanus Agus Haryono, Shaowei Wang, and David Lo. Real world projects, real faults: evaluating spectrum based fault localization techniques on Python projects. *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10189-4`.

Lamine:2022:USD

[1316] Yassine Lamine and Jinghui Cheng. Understanding and supporting the design systems practice. *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10181-y`.

DiGregorio:2022:MAA

[1317] Marianna Di Gregorio, Dario Di Nucci, Fabio Palomba, and Giuliana Vitiello. The making of accessible Android applications: an empirical study on the state of the practice. *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10182-x`.

Wu:2022:PQI

[1318] Jiahui Wu, Paolo Arcaini, Tao Yue, Shaukat Ali, and Huihui Zhang. On the preferences of quality indicators for multi-objective search algorithms in search-based software engineering. *Empirical Software Engineering*, 27 (6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10127-4`.

Henning:2022:CMB

[1319] Sören Henning and Wilhelm Hasselbring. A configurable method for benchmarking scalability of cloud-native applications. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10162-1`.

Lee:2022:OPA

[1320] Jaekwon Lee, Seung Yeob Shin, Shiva Nejati, and Lionel C. Briand. Optimal priority assignment for real-time systems: a coevolution-based approach. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10170-1`.

UlHaq:2022:CCO

[1321] Fitash Ul Haq, Donghwan Shin, Shiva Nejati, and Lionel Briand. Correction to: Can offline testing of deep neural networks replace their online testing? *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10172-z`. See [1158].

Li:2022:GBF

[1322] Zhuo Li, Yuechen Wu, Lei Ma, Xiaofei Xie, Yingfeng Chen, and Changjie Fan. GBGallery: a benchmark and framework for game testing. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10158-x`.

Cassee:2022:SAT

[1323] Nathan Cassee, Fiorella Zampetti, Nicole Novielli, Alexander Serebrenik, and Massimiliano Di Penta. Self-Admitted Technical Debt and comments' polarity: an empirical study. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10183-w`.

Eisty:2022:TRS

[1324] Nasir U. Eisty and Jeffrey C. Carver. Testing research software: a survey. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10184-9`.

Naeem:2022:PSI

[1325] Hajra Naeem and Manar H. Alalfi. Predicting sensitive information leakage in IoT applications using flows-aware machine learning approach. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10157-y`.

Kondo:2022:ESI

[1326] Masanari Kondo, Yutaro Kashiwa, Yasutaka Kamei, and Osamu Mizuno. An empirical study of issue-link algorithms: which issue-link algorithms should we use? *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10120-x`.

Robles:2022:DEE

[1327] Gregorio Robles, Andrea Capiluppi, Jesus M. Gonzalez-Barahona, Björn Lundell, and Jonas Gamalielsson. Development effort estimation in free/open source software from activity in version control systems. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10166-x`.

Lin:2022:UBM

[1328] Jiahuei Lin, Haoxiang Zhang, Bram Adams, and Ahmed E. Hassan. Upstream bug management in Linux distributions. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10173-y`.

Lima:2022:CEL

[1329] Jackson A. Prado Lima, Willian D. F. Mendonça, Silvia R. Vergilio, and Wesley K. G. Assunção. Cost-effective learning-based strategies for test case prioritization in continuous integration of highly-configurable software. *Empirical Software Engineering*, 27 (6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10093-3`.

Sanchez:2022:MTW

[1330] Ana B. Sánchez, Pedro Delgado-Pérez, Inmaculada Medina-Bulo, and Sergio Segura. Mutation testing in the wild: findings from GitHub. *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10177-8`.

Li:2022:ISA

[1331] Yikun Li, Mohamed Soliman, and Paris Avgeriou. Identifying self-admitted technical debt in issue tracking systems using machine learning. *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10128-3`.

Muse:2022:FSD

[1332] Biruk Asmare Muse, Csaba Nagy, Anthony Cleve, Foutse Khomh, and Giuliano Antoniol. FIXME: synchronize with database! An empirical study of data access self-admitted technical debt. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10119-4`.

Even-Mendoza:2022:CME

[1333] Karine Even-Mendoza, Cristian Cadar, and Alastair F. Donaldson. CsmithEdge: more effective compiler testing by handling undefined behaviour less conservatively. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10146-1`.

Abdi:2022:SAT

[1334] Mehrdad Abdi, Henrique Rocha, Serge Demeyer, and Alexandre Bergel. Smallamp: Test amplification in a dynamically typed language. *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10169-8`.

Han:2022:CSD

[1335] Xiaofeng Han, Amjed Tahir, Peng Liang, Steve Counsell, Kelly Blincoe, Bing Li, and Yajing Luo. Code smells detection via modern code review: a study of the OpenStack and Qt communities. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10178-7`.

Zhang:2022:PRL

[1336] Xunhui Zhang, Yue Yu, Tao Wang, Ayushi Rastogi, and Huaimin Wang. Pull request latency explained: an empirical overview. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10143-4`.

Herbold:2022:FGD

[1337] Steffen Herbold, Alexander Trautsch, Benjamin Ledel, Alireza Aghamohammadi, Taher A. Ghaleb, Kuljit Kaur Chahal, Tim Bossenmaier, Bhaveet Nagaria, Philip Makedonski, Matin Nili Ahmadabadi, Kristof Szabados, Helge Spieker, Matej Madeja, Nathaniel Hoy, Valentina Lenarduzzi, Shangwen Wang, Gema Rodríguez-Pérez, Ricardo Colomo-Palacios, Roberto Verdecchia, Paramvir Singh, Yihao Qin, Debasish Chakroborti, Willard Davis, Vijay Walunj, Hongjun Wu, Diego Marcilio, Omar Alam, Abdullah Aldaeej, Idan Amit, Burak Turhan, Simon Eismann, Anna-Katharina Wickert, Ivano Malavolta, Matúš Sulír, Fatemeh Fard, Austin Z. Henley, Stratos Kourtzanidis, Eray Tuzun, Christoph Treude, Simin Maleki Shamasbi, Ivan Pashchenko, Marvin Wyrich, James Davis, Alexander Serebrenik, Ella Albrecht, Ethem Utku Aktas, Daniel Strüber, and Johannes Erbel. A fine-grained data set and analysis of tangling in bug fixing commits. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10083-5`.

Boutaib:2022:HUS

[1338] Sofien Boutaib, Maha Elarbi, Slim Bechikh, Fabio Palomba, and Lamjed Ben Said. Handling uncertainty in SBSE: a possibilistic evolutionary approach for code smells detection. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10142-5`.

Feitelson:2022:CPR

[1339] Dror G. Feitelson. Considerations and pitfalls for reducing threats to the validity of controlled experiments on code comprehension. *Empirical Software Engineering*, 27(6):??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10160-3`.

Xia:2022:PHI

[1340] Tianpei Xia, Wei Fu, Rui Shu, Rishabh Agrawal, and Tim Men-

zies. Predicting health indicators for open source projects (using hyperparameter optimization). *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10171-0`.

Aagren:2022:ASD

[1341] Pernilla Ågren, Eli Knoph, and Richard Berntsson Svensson. Agile software development one year into the COVID-19 pandemic. *Empirical Software Engineering*, 27(6): ??, November 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10176-9`.

Tao:2022:LSE

[1342] Wei Tao, Yanlin Wang, Ensheng Shi, Lun Du, Shi Han, Hongyu Zhang, Dongmei Zhang, and Wenqiang Zhang. A large-scale empirical study of commit message generation: models, datasets and evaluation. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10219-1`.

Li:2022:SAR

[1343] Zhaoxuan Li, Siqi Lu, Rui Zhang, Rui Xue, Wenqiu Ma, Rujin Liang, Ziming Zhao, and Sheng Gao. SmartFast: an accurate and robust formal analysis tool for Ethereum smart contracts. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10218-2`.

Haggag:2022:LSA

[1344] Omar Haggag, John Grundy, Mohamed Abdelrazek, and Sherif Haggag. A large scale analysis of mHealth app user reviews. *Empirical Software Engineering*, 27(7): ??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10222-6`.

Oliveira:2022:DPM

[1345] Daniel Oliveira, Wesley K. G. Assunção, Alessandro Garcia, Baldoino Fonseca, and Márcio Ribeiro. Developers' perception matters: machine learning to detect developer-sensitive smells. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10234-2`.

Flint:2022:PGU

[1346] Samuel W. Flint, Jigyasa Chauhan, and Robert Dyer. Pitfalls and guidelines for using time-based Git data. *Empirical Software Engineering*, 27 (7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10200-y`.

Yahmed:2022:DSB

[1347] Ahmed Haj Yahmed, Houssem Ben Braiek, Foutse Khomh, Sonia Bouzidi,

and Rania Zaatour. DiverGet: a search-based software testing approach for deep neural network quantization assessment. *Empirical Software Engineering*, 27(7): ??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10202-w`.

Derakhshanfar:2022:BBC

[1348] Pouria Derakhshanfar, Xavier Devroey, and Andy Zaidman. Basic block coverage for search-based unit testing and crash reproduction. *Empirical Software Engineering*, 27(7): ??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10155-0`.

Natella:2022:SGF

[1349] Roberto Natella. StateAFL: Greybox fuzzing for stateful network servers. *Empirical Software Engineering*, 27 (7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10233-3`.

Namavar:2022:CED

[1350] Marjane Namavar, Noor Nashid, and Ali Mesbah. A controlled experiment of different code representations for learning-based program repair. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10223-5`.

Lomio:2022:MDL

[1351] Francesco Lomio, Sergio Moreschini, and Valentina Lenarduzzi. A machine and deep learning analysis among SonarQube rules, product, and process metrics for fault prediction. *Empirical Software Engineering*, 27(7): ??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10164-z`.

Junior:2022:CMM

[1352] Ivaldir de Farias Junior, Sabrina Marczak, Rodrigo Santos, Cleyton Rodrigues, and Hermano Moura. C2M: a maturity model for the evaluation of communication in distributed software development. *Empirical Software Engineering*, 27(7): ??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10211-9`.

Pontillo:2022:STF

[1353] Valeria Pontillo, Fabio Palomba, and Filomena Ferrucci. Static test flakiness prediction: How far can we go? *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10227-1`.

Liang:2022:MFL

[1354] Hongliang Liang, Dengji Hang, and Xiangyu Li. Modeling function-level interactions for file-level bug localization. *Empirical Software Engineering*,

27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10237-z.

Lavazza:2022:CMP

[1355] Luigi Lavazza and Sandro Morasca. Comparing φ and the F-measure as performance metrics for software-related classifications. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10199-2.

Vidaurre:2022:TVG

[1356] Andreina Cota Vidaurre, Evelyn Cusi López, Juan Pablo Sandoval Alcocer, and Alexandre Bergel. TestEvoViz: visualizing genetically-based test coverage evolution. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10220-8.

Lee:2022:MMI

[1357] Jung-Chieh Lee and Chung-Yang Chen. Motivating members' involvement to effectually conduct collaborative software process tailoring. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10225-3.

Tunkel:2022:ERB

[1358] Steffen Tunkel and Steffen Herbold. Exploring the relationship between performance metrics and cost saving potential of defect prediction models. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10224-4.

Aktas:2022:USA

[1359] Ethem Utku Aktas and Cemal Yilmaz. Using screenshot attachments in issue reports for triaging. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10228-0.

Hoffmann:2022:EEN

[1360] Benjamin Hoffmann, Neil Urquhart, Kevin Chalmers, and Michael Guckert. An empirical evaluation of a novel domain-specific language — modelling vehicle routing problems with Athos. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10210-w.

Prestat:2022:ESA

[1361] Dimitri Prestat, Naouel Moha, and Roger Villemaire. An empirical study of Android behavioural code smells detection. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10212-8.

Borovits:2022:FUM

[1362] Nemania Borovits, Indika Kumara, Dario Di Nucci, Parvathy Krishnan, Stefano Dalla Palma, Fabio Palomba, Damian A. Tamburri, and Willem-Jan van den Heuvel. FindICI: Using machine learning to detect linguistic inconsistencies between code and natural language descriptions in infrastructure-as-code. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10215-5.

Fregnan:2022:ECD

[1363] Enrico Fregnan, Fernando Petrulio, and Alberto Bacchelli. The evolution of the code during review: an investigation on review changes. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10205-7.

Tsay:2022:EEA

[1364] Jason Tsay, Alan Braz, Martin Hirzel, Avraham Shinnar, and Todd Mummert. Extracting enhanced artificial intelligence model metadata from software repositories. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10206-6.

Bradley:2022:SSD

[1365] Nick C. Bradley, Thomas Fritz, and Reid Holmes. Sources of software development task friction. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10187-6.

Diaz:2022:DRQ

[1366] Oscar Díaz and Jeremías P. Contell. Developing research questions in conversation with the literature: operationalization & tool support. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10204-8.

Dominic:2022:HEC

[1367] James Dominic, Brock Tubre, Deborah Kunkel, and Paige Rodeghero. The human experience of comprehending source code in virtual reality. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10196-5.

Wu:2022:UDD

[1368] Xiongfei Wu, Jinqiu Yang, Lei Ma, Yinxing Xue, and Jianjun Zhao. On the usage and development of deep learning compilers: an empirical study on TVM. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10221-7.

Zhou:2022:SSP

[1369] Zhou Zhou, Lili Bo, Xiaoxue Wu, Xiaobing Sun, Tao Zhang, Bin Li, Jiale Zhang, and Sicong Cao. SPVF: security property assisted vulnerability fixing via attention-based models. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10216-4.

Panichella:2022:TSY

[1370] Annibale Panichella, Sebastiano Panichella, Gordon Fraser, Anand Ashok Sawant, and Vincent J. Hellendoorn. Test smells 20 years later: detectability, validity, and reliability. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10207-5.

Garg:2022:LWW

[1371] Aayush Garg, Renzo Degiovanni, Matthieu Jimenez, Maxime Cordy, Mike Papadakis, and Yves Le Traon. Learning from what we know: How to perform vulnerability prediction using noisy historical data. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10197-4.

Zyrianov:2022:DVS

[1372] Vlas Zyrianov, Cole S. Peterson, Drew T. Guarnera, Joshua Behler, Praxis Weston, Bonita Sharif, and Jonathan I. Maletic. Deja vu: semantics-aware recording and replay of high-speed eye tracking and interaction data to support cognitive studies of software engineering tasks — methodology and analyses. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10209-3.

Mahmoud:2022:OEE

[1373] Ahmed Samir Imam Mahmoud, Tapajit Dey, Alexander Nolte, Audris Mockus, and James D. Herbsleb. One-off events? An empirical study of hackathon code creation and reuse. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10201-x.

daSilva:2022:ISB

[1374] Diego Fernandes da Silva, Luiz Fernando Okada, Wesley K. G. Assunção, and Thelma Elita Colanzi. Intensifying the search-based optimization of product line architectures with crossover operators. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10198-3.

Alami:2022:HSA

[1375] Adam Alami and Oliver Krancher. How Scrum adds value to achieving software quality? *Empirical Software Engineering*, 27(7): ??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10208-4`.

Vieira:2022:RBR

[1376] Renan G. Vieira, César Lincoln C. Mattos, Lincoln S. Rocha, João Paulo P. Gomes, and Matheus Paixão. The role of bug report evolution in reliable fixing estimation. *Empirical Software Engineering*, 27(7): ??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10213-7`.

Xavier:2022:DSA

[1377] Laerte Xavier, João Eduardo Montandon, Fabio Ferreira, Rodrigo Brito, and Marco Tulio Valente. On the documentation of self-admitted technical debt in issues. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10203-9`.

Zhang:2022:FFB

[1378] Tanghaoran Zhang, Yue Yu, Xinjun Mao, Yao Lu, Zhixing Li, and Huaimin Wang. FENSE: a feature-based ensemble modeling approach to cross-project just-in-time defect prediction. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10185-8`.

Turcotte:2022:SDD

[1379] Alexi Turcotte, Ellen Arteca, Ashish Mishra, Saba Alimadadi, and Frank Tip. Stubbifier: debloating dynamic server-side JavaScript applications. *Empirical Software Engineering*, 27(7):??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10195-6`.

Basile:2022:SDE

[1380] Davide Basile, Maurice H. ter Beek, Sami Lazreg, Maxime Cordy, and Axel Legay. Static detection of equivalent mutants in real-time model-based mutation testing. *Empirical Software Engineering*, 27(7): ??, December 2022. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10149-y`.

Dingsoyr:2023:LEC

[1381] Torgeir Dingsøyr, Finn Olav Bjørnson, Julian Schrof, and Tor Sporsem. A longitudinal explanatory case study of coordination in a very large development programme: the impact of transitioning from a first- to a second-generation large-scale agile development method. *Empirical Software Engineering*, 28 (1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https:`

//link.springer.com/article/10.1007/s10664-022-10230-6.

Iwaya:2023:PMH

[1382] Leonardo Horn Iwaya, M. Ali Babar, Awais Rashid, and Chamila Wijayarathna. On the privacy of mental health apps. *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10236-0.

DellAnna:2023:ECS

[1383] Davide Dell'Anna, Fatma Başak Aydemir, and Fabiano Dalpiaz. Evaluating classifiers in SE research: the ECSER pipeline and two replication studies. *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10243-1.

AlAlamin:2023:DDT

[1384] Md Abdullah Al Alamin, Gias Uddin, Sanjay Malakar, Sadia Afroz, Tameem Haider, and Anindya Iqbal. Developer discussion topics on the adoption and barriers of low code software development platforms. *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10244-0.

Mehrpour:2023:CSA

[1385] Sahar Mehrpour and Thomas D. LaToza. Can static analysis tools find more defects? *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10232-4.

Fu:2023:ESI

[1386] Ying Fu, Meng Yan, Zhou Xu, Xin Xia, Xiaohong Zhang, and Dan Yang. An empirical study of the impact of log parsers on the performance of log-based anomaly detection. *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10214-6.

Ramasamy:2023:WAD

[1387] Dhivyabharathi Ramasamy, Cristina Sarasua, Alberto Bacchelli, and Abraham Bernstein. Workflow analysis of data science code in public GitHub repositories. *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10229-z.

Hou:2023:SLR

[1388] Fang Hou and Slinger Jansen. A systematic literature review on trust in the software ecosystem. *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10238-y.

Mondal:2023:APR

[1389] Saikat Mondal, Gias Uddin, and Chanchal Roy. Automatic prediction of rejected edits in Stack Overflow. *Empirical Software Engineering*, 28(1): ??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10242-2`.

Aghayi:2023:CEI

[1390] Emad Aghayi and Thomas D. LaToza. A controlled experiment on the impact of microtasking on programming. *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10226-2`.

Schurhoff:2023:ESS

[1391] Christian Schürhoff, Stefan Hanenberg, and Volker Gruhn. An empirical study on a single company's cost estimations of 338 software projects. *Empirical Software Engineering*, 28 (1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10245-z`.

Wu:2023:LSO

[1392] Di Wu, Xiao-Yuan Jing, Hongyu Zhang, Yuming Zhou, and Baowen Xu. Leveraging Stack Overflow to detect relevant tutorial fragments of APIs. *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10235-1`.

Traini:2023:TEA

[1393] Luca Traini, Vittorio Cortellessa, Daniele Di Pompeo, and Michele Tucci. Towards effective assessment of steady state performance in Java software: are we there yet? *Empirical Software Engineering*, 28(1): ??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10247-x`.

Young:2023:VSS

[1394] Jeffrey M. Young, Paul Maximilian Bittner, Eric Walkingshaw, and Thomas Thüm. Variational satisfiability solving: efficiently solving lots of related SAT problems. *Empirical Software Engineering*, 28(1): ??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10217-3`.

Nadi:2023:STP

[1395] Sarah Nadi and Nourhan Sakr. Selecting third-party libraries: the data scientist's perspective. *Empirical Software Engineering*, 28(1): ??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10241-3`.

Hora:2023:ECT

[1396] Andre Hora. Excluding code from test coverage: practices, motivations, and

impact. *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10259-7`.

Kamienski:2023:ATD

[1397] Arthur Kamienski, Abram Hindle, and Cor-Paul Bezemer. Analyzing techniques for duplicate question detection on Q&A Websites for game developers. *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10256-w`.

Temple:2023:CCS

[1398] William G. Temple, Yue Wu, Carmen Cheh, Yuan Li, Binbin Chen, Zbigniew T. Kalbarczyk, William H. Sanders, and David Nicol. CyberSAGE: The cyber security argument graph evaluation tool. *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-021-10056-8`.

Liu:2023:TUB

[1399] Di Liu, Yang Feng, Yanyan Yan, and Baowen Xu. Towards understanding bugs in Python interpreters. *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10239-x`.

Rwemalika:2023:SSU

[1400] Renaud Rwemalika, Sarra Habchi, Mike Papadakis, Yves Le Traon, and Marie-Claude Brasseur. Smells in system user interactive tests. *Empirical Software Engineering*, 28(1):??, January 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10251-1`.

Weir:2023:ISS

[1401] Charles Weir, Ingolf Becker, and Lynne Blair. Incorporating software security: using developer workshops to engage product managers. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10252-0`.

Daoudi:2023:AOC

[1402] Nadia Daoudi, Kevin Allix, Tegawendé F. Bissyandé, and Jacques Klein. Assessing the opportunity of combining state-of-the-art Android malware detectors. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10249-9`.

Arya:2023:HPF

[1403] Deeksha M. Arya, Jin L. C. Guo, and Martin P. Robillard. How programmers find online learning resources. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10246-y.

Garcia:2023:SVS

[1404] Sergio García, Daniel Strüber, Davide Brugali, Alessandro Di Fava, Patrizio Pelliccione, and Thorsten Berger. Software variability in service robotics. *Empirical Software Engineering*, 28 (2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10231-5.

Hoppner:2023:CAD

[1405] Stefan Höppner, Yves Haas, Matthias Tichy, and Katharina Juhnke. Correction to: Advantages and disadvantages of (dedicated) model transformation languages. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10264-w. See [1303].

Devine:2023:ESU

[1406] Peter Devine, Yun Sing Koh, and Kelly Blincoe. Evaluating software user feedback classifier performance on unseen apps, datasets, and metadata. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10254-y.

Rocha:2023:UAT

[1407] Thaís Rocha and Paulo Borba. Using acceptance tests to predict merge conflict risk. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10266-8.

Yerramreddy:2023:EAM

[1408] Sai Yerramreddy, Austin Mordahl, Ugur Koc, Shiyi Wei, Jeffrey S. Foster, Marine Carpuat, and Adam A. Porter. An empirical assessment of machine learning approaches for triaging reports of static analysis tools. *Empirical Software Engineering*, 28 (2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10253-z.

Sundermann:2023:ESA

[1409] Chico Sundermann, Tobias Heß, Michael Nieke, Paul Maximilian Bittner, Jeffrey M. Young, Thomas Thüm, and Ina Schaefer. Evaluating state-of-the-art #SAT solvers on industrial configuration spaces. *Empirical Software Engineering*, 28 (2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10265-9.

Trautsch:2023:WRC

[1410] Alexander Trautsch, Johannes Erbel, Steffen Herbold, and Jens Grabowski. What really changes when developers intend to improve their source code:

a commit-level study of static metric value and static analysis warning changes. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10257-9`.

Jiang:2023:CRI

[1411] Zigui Jiang, Xiuwen Tang, Zibin Zheng, Jinyan Guo, Xiapu Luo, and Yin Li. Calling relationship investigation and application on Ethereum Blockchain System. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10240-4`.

Pinto:2023:ACR

[1412] Felipe Curty do Rego Pinto and Leonardo Gresta Paulino Murta. On the assignment of commits to releases. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10263-x`.

Dorn:2023:MUP

[1413] Johannes Dorn, Sven Apel, and Norbert Siegmund. Mastering uncertainty in performance estimations of configurable software systems. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10250-2`.

Herbold:2023:DTM

[1414] Steffen Herbold and Steffen Tunkel. Differential testing for machine learning: an analysis for classification algorithms beyond deep learning. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10273-9`.

Alfayez:2023:WAA

[1415] Reem Alfayez, Yunyan Ding, Robert Winn, Ghaida Alfayez, Christopher Harman, and Barry Boehm. What is asked about technical debt (TD) on Stack Exchange question-and-answer (Q&A) websites? An observational study. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10269-5`.

Lukasczyk:2023:ESA

[1416] Stephan Lukasczyk, Florian Kroiß, and Gordon Fraser. An empirical study of automated unit test generation for Python. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10248-w`.

Falessi:2023:EDP

[1417] Davide Falessi, Simone Mesiano Laureani, Jonida Çarka, Matteo Esposito, and Daniel Alencar da Costa. Enhancing the defectiveness prediction of methods and classes via JIT.

Empirical Software Engineering, 28 (2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10261-z`.

Napier:2023:EST

[1418] Kollin Napier, Tanmay Bhowmik, and Shaowei Wang. An empirical study of text-based machine learning models for vulnerability detection. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10276-6`.

Pacheco:2023:WME

[1419] Michael Pacheco, Gustavo A. Oliva, Gopi Krishnan Rajbahadur, and Ahmed E. Hassan. What makes Ethereum blockchain transactions be processed fast or slow? An empirical study. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10283-7`.

Shahin:2023:ADA

[1420] Ramy Shahin, Rafael Toledo, Robert Hackman, Ramesh S, Joanne M. Atlee, and Marsha Chechik. Applying declarative analysis to industrial automotive software product line models. *Empirical Software Engineering*, 28 (2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10290-2`.

Meidani:2023:AES

[1421] Mehran Meidani, Maxime Lamothe, and Shane McIntosh. Assessing the exposure of software changes. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10270-y`.

Krasniqi:2023:MMF

[1422] Rrezarta Krasniqi and Hyunsook Do. A multi-model framework for semantically enhancing detection of quality-related bug report descriptions. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10280-w`.

Yang:2023:ISA

[1423] Nan Yang, Pieter Cuijpers, Dennis Hendriks, Ramon Schiffelers, Johan Lukkien, and Alexander Serebrenik. An interview study about the use of logs in embedded software engineering. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10258-8`.

Abyane:2023:TUQ

[1424] Amin Eslami Abyane, Derui Zhu, Roberto Souza, Lei Ma, and Hadi Hemmati. Towards understanding quality challenges of the federated learning for neural networks: a first look from the lens of robustness.

Empirical Software Engineering, 28 (2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10262-y`.

Mastropaolo:2023:AVR

[1425] Antonio Mastropaolo, Emad Aghajani, Luca Pascarella, and Gabriele Bavota. Automated variable renaming: are we there yet? *Empirical Software Engineering*, 28(2): ??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10274-8`.

Muse:2023:RPC

[1426] Biruk Asmare Muse, Foutse Khomh, and Giuliano Antoniol. Refactoring practices in the context of data-intensive systems. *Empirical Software Engineering*, 28(2): ??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10271-x`.

Lin:2023:VML

[1427] Jiahuei Lin, Haoxiang Zhang, Bram Adams, and Ahmed E. Hassan. Vulnerability management in Linux distributions. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10267-7`.

Kargen:2023:ADP

[1428] Ulf Kargén, Noah Mauthe, and Nahid Shahmehri. Android decompiler performance on benign and malicious apps: an empirical study. *Empirical Software Engineering*, 28(2): ??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10281-9`.

Zhao:2023:ICI

[1429] Kunsong Zhao, Zhou Xu, Meng Yan, Tao Zhang, Lei Xue, Ming Fan, and Jacky Keung. The impact of class imbalance techniques on crashing fault residence prediction models. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10294-y`.

Izadi:2023:SET

[1430] Maliheh Izadi, Mahtab Nejati, and Abbas Heydarnoori. Semantically-enhanced topic recommendation systems for software projects. *Empirical Software Engineering*, 28(2): ??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10272-w`.

Bjarnason:2023:SSL

[1431] Elizabeth Bjarnason, Patrik Åberg, and Nauman bin Ali. Software selection in large-scale software engineering: a model and criteria based

on interactive rapid reviews. *Empirical Software Engineering*, 28(2): ??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10288-w`.

Mazrae:2023:UCU

[1432] Pooya Rostami Mazrae, Tom Mens, Mehdi Golzadeh, and Alexandre Decan. On the usage, co-usage and migration of CI/CD tools: a qualitative analysis. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10285-5`.

Russo:2023:SPS

[1433] Daniel Russo, Paul H. P. Hanel, Seraphina Altnickel, and Niels van Berkel. Satisfaction and performance of software developers during enforced work from home in the COVID-19 pandemic. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10293-z`.

Karmakar:2023:JEJ

[1434] Anjan Karmakar, Miltiadis Allamanis, and Romain Robbes. JEMMA: an extensible Java dataset for ML4Code applications. *Empirical Software Engineering*, 28(2):??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10275-7`.

Ernst:2023:RRS

[1435] Neil A. Ernst and Maria Teresa Baldassarre. Registered reports in software engineering. *Empirical Software Engineering*, 28(2): ??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10277-5`.

Abnane:2023:EEI

[1436] Ibtissam Abnane, Ali Idri, Imane Chlioui, and Alain Abran. Evaluating ensemble imputation in software effort estimation. *Empirical Software Engineering*, 28(2): ??, March 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10260-0`.

Blincoe:2023:PSI

[1437] Kelly Blincoe and Zhenchang Xing. Preface to the special issue on the 36th IEEE International Conference on Software Maintenance and Evolution (ICSME 2020). *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10268-6`.

Ramasamy:2023:VDS

[1438] Dhivyabharathi Ramasamy, Cristina Sarasua, Alberto Bacchelli, and Abraham Bernstein. Visualising data science workflows to support third-party notebook comprehension: an empirical study. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN

ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10289-9.

Alfadel:2023:EAS

[1439] Mahmoud Alfadel, Diego Elias Costa, and Emad Shihab. Empirical analysis of security vulnerabilities in Python packages. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10278-4.

Bhatia:2023:TCT

[1440] Aaditya Bhatia, Ellis E. Eghan, Manel Grichi, William G. Cavanagh, Zhen Ming Jiang, and Bram Adams. Towards a change taxonomy for machine learning pipelines. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10282-8.

Peng:2023:VEI

[1441] Kewen Peng, Christian Kaltenecker, Norbert Siegmund, Sven Apel, and Tim Menzies. VEER: enhancing the interpretability of model-based optimizations. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10296-w.

Morovati:2023:BML

[1442] Mohammad Mehdi Morovati, Amin Nikanjam, Foutse Khomh, and Zhen Ming Jiang. Bugs in machine learning-based systems: a faultload benchmark. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10291-1.

Zhong:2023:ESA

[1443] Hao Zhong and Xiaoyin Wang. An empirical study on API usages from code search engine and local library. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10304-z.

Caivano:2023:SED

[1444] Danilo Caivano, Pietro Cassieri, Simone Romano, and Giuseppe Scanniello. On the spread and evolution of dead methods in Java desktop applications: an exploratory study. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10303-0.

Li:2023:AIS

[1445] Yikun Li, Mohamed Soliman, and Paris Avgeriou. Automatic identification of self-admitted technical debt from four different sources. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10297-9.

Trautsch:2023:ASA

[1446] Alexander Trautsch, Steffen Herbold, and Jens Grabowski. Are automated static analysis tools worth it? An investigation into relative warning density and external software quality on the example of Apache open source projects. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10301-2`.

Nurwidyantoro:2023:IHV

[1447] Arif Nurwidyantoro, Mojtaba Shahin, Michel Chaudron, Waqar Hussain, Harsha Perera, Rifat Ara Shams, and Jon Whittle. Integrating human values in software development using a human values dashboard. *Empirical Software Engineering*, 28 (3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10305-y`.

Hayashi:2023:ISI

[1448] Shinpei Hayashi, Yann-Gaël Guéhéneuc, and Michel R. V. Chaudron. Introduction to the special issue on program comprehension. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10279-3`.

daCosta:2023:SCS

[1449] Daniel Alencar da Costa, Natalie Grattan, Nigel Stanger, and Sherlock A. Licorish. Studying the characteristics of SQL-related development tasks: an empirical study. *Empirical Software Engineering*, 28 (3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10295-x`.

Ehsan:2023:RCC

[1450] Osama Ehsan, Foutse Khomh, Ying Zou, and Dong Qiu. Ranking code clones to support maintenance activities. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10292-0`.

Birchler:2023:MLB

[1451] Christian Birchler, Sajad Khatiri, Bill Bosshard, Alessio Gambi, and Sebastiano Panichella. Machine learning-based test selection for simulation-based testing of self-driving cars software. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10286-y`.

Parry:2023:EEF

[1452] Owain Parry, Gregory M. Kapfhammer, Michael Hilton, and Phil McMinn. Empirically evaluating flaky test detection techniques combining test case rerunning and machine learning models. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10307-w.

Stocco:2023:MVS

[1453] Andrea Stocco, Brian Pulfer, and Paolo Tonella. Model vs system level testing of autonomous driving systems: a replication and extension study. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10306-x.

Stocco:2023:STM

[1454] Andrea Stocco, Onn Shehory, Gunel Jahangirova, Vincenzo Riccio, Guy Barash, Eitan Farchi, and Diptikalyan Saha. Software testing in the machine learning era. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10326-7.

Assavakamhaenghan:2023:DFR

[1455] Noppadol Assavakamhaenghan, Supatsara Wattanakriengkrai, Naomichi Shimada, Raula Gaikovina Kula, Takashi Ishio, and Kenichi Matsumoto. Does the first response matter for future contributions? A study of first contributions. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10299-7.

Torre:2023:DLT

[1456] Damiano Torre, Frantzy Mesadieu, and Anitha Chennamaneni. Deep learning techniques to detect cybersecurity attacks: a systematic mapping study. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10302-1.

Alazba:2023:DLA

[1457] Amal Alazba, Hamoud Aljamaan, and Mohammad Alshayeb. Deep learning approaches for bad smell detection: a systematic literature review. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10312-z.

Han:2023:CSC

[1458] Yisi Han, Zhendong Wang, Yang Feng, Zhihong Zhao, and Yi Wang. Cross-status communication and project outcomes in OSS development. *Empirical Software Engineering*, 28(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10298-8.

Deiner:2023:ATG

[1459] Adina Deiner, Patric Feldmeier, Gordon Fraser, Sebastian Schweikl, and Wengran Wang. Automated test generation for Scratch programs. *Empirical Software Engineering*, 28

(3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-022-10255-x.

Zaina:2023:WDS

[1460] Luciana Zaina, Joelma Choma, Jullia Saad, Leonor Barroca, Helen Sharp, Leticia Machado, and Cleidson R. B. de Souza. What do software startups need from UX work? *Empirical Software Engineering*, 28 (3):??, May 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10322-x.

daCosta:2023:SCT

[1461] José Aldo Silva da Costa, Rohit Gheyi, Fernando Castor, Pablo Roberto Fernandes de Oliveira, Márcio Ribeiro, and Baldoino Fonseca. Seeing confusion through a new lens: on the impact of atoms of confusion on novices' code comprehension. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10311-0.

Chouchen:2023:LPC

[1462] Moataz Chouchen, Ali Ouni, Jefferson Olongo, and Mohamed Wiem Mkaouer. Learning to predict code review completion time in modern code review. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10300-3.

Shameer:2023:RBD

[1463] Sheik Shameer, Gema Rodríguez-Pérez, and Meiyappan Nagappan. Relationship between diversity of collaborative group members' race and ethnicity and the frequency of their collaborative contributions in GitHub. *Empirical Software Engineering*, 28 (4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10313-y.

Maeprasart:2023:URE

[1464] Vittunyuta Maeprasart, Supatsara Wattanakriengkrai, Raula Gaikovina Kula, Christoph Treude, and Kenichi Matsumoto. Understanding the role of external pull requests in the NPM ecosystem. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10315-w.

Ayas:2023:ESS

[1465] Hamdy Michael Ayas, Philipp Leitner, and Regina Hebig. An empirical study of the systemic and technical migration towards microservices. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10308-9.

Ciurumelea:2023:CFD

[1466] Adelina Ciurumelea, Carol V. Alexandru, Harald C. Gall, and Sebastian Proksch. Completing function documentation comments using structural information. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-022-10284-6`.

Mi:2023:GBC

[1467] Qing Mi, Yi Zhan, Han Weng, Qinghang Bao, Longjie Cui, and Wei Ma. A graph-based code representation method to improve code readability classification. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10319-6`.

Hadi:2023:EPT

[1468] Mohammad A. Hadi and Fatemeh H. Fard. Evaluating pre-trained models for user feedback analysis in software engineering: a study on classification of app-reviews. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10314-x`.

Iannone:2023:RSW

[1469] Emanuele Iannone, Zadia Codabux, Valentina Lenarduzzi, Andrea De Lucia, and Fabio Palomba. Rubbing salt in the wound? A large-scale investigation into the effects of refactoring on security. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10287-x`.

Labunets:2023:NEB

[1470] Katsiaryna Labunets, Fabio Massacci, Federica Paci, and Katja Tuma. A new, evidence-based, theory for knowledge reuse in security risk analysis. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10321-y`.

Xiao:2023:MLC

[1471] Tao Xiao, Sebastian Baltes, Hideaki Hata, Christoph Treude, Raula Gaikovina Kula, Takashi Ishio, and Kenichi Matsumoto. 18 million links in commit messages: purpose, evolution, and decay. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10325-8`.

Sultana:2023:CRO

[1472] Sayma Sultana, Asif Kamal Turzo, and Amiangshu Bosu. Code reviews in open source projects: how do gender biases affect participation and outcomes? *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10324-9`.

Rahman:2023:ECS

[1473] Akond Rahman, Dibyendu Brinto Bose, Raunak Shakya, and Rahul Pandita. *Come for syntax, stay for speed, understand defects*: an empirical study of defects in Julia programs. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10328-5`.

Ozkan:2023:RDD

[1474] Ozan Özkan, Önder Babur, and Mark van den Brand. Refactoring with domain-driven design in an industrial context. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10310-1`.

Guizzo:2023:ITM

[1475] Giovani Guizzo, Francesco Califano, Federica Sarro, Filomena Ferrucci, and Mark Harman. Inferring test models from user bug reports using multi-objective search. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10333-8`.

Yan:2023:HDP

[1476] Aoyang Yan, Hao Zhong, Daohan Song, and Li Jia. How do programmers fix bugs as workarounds? An empirical study on Apache projects. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10318-7`.

Bernardo:2023:ICI

[1477] João Helis Bernardo, Daniel Alencar da Costa, Uirá Kulesza, and Christoph Treude. The impact of a continuous integration service on the delivery time of merged pull requests. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10327-6`.

Matsubara:2023:MMT

[1478] Patrícia G. F. Matsubara, Igor Steinmacher, Bruno Gadelha, and Tayana Conte. Much more than a prediction: Expert-based software effort estimation as a behavioral act. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10332-9`.

Malik:2023:ESV

[1479] Jahanzaib Malik and Fabrizio Pastore. An empirical study of vulnerabilities in edge frameworks to support security testing improvement. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10330-x`.

Cadavid:2023:IHS

[1480] Héctor Cadavid, Vasilios Andrikopoulos, and Paris Avgeriou. Improving hardware/software interface management in systems of systems through documentation as code. *Empirical Software Engineering*, 28 (4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10350-7`.

Zimmermann:2023:GTC

[1481] Théo Zimmermann and Jean-Rémy Falleri. A grounded theory of community package maintenance organizations. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10337-4`.

Vegi:2023:UCS

[1482] Lucas Francisco da Matta Vegi and Marco Tulio Valente. Understanding code smells in Elixir functional language. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10343-6`.

Lan:2023:BAL

[1483] Jinpeng Lan, Lina Gong, Jingxuan Zhang, and Haoxiang Zhang. BTLink: automatic link recovery between issues and commits based on pre-trained BERT model. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10342-7`.

Petke:2023:PTL

[1484] Justyna Petke, Brad Alexander, Earl T. Barr, Alexander E. I. Brownlee, Markus Wagner, and David R. White. Program transformation landscapes for automated program modification using gin. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10344-5`.

Itzik:2023:DAM

[1485] David Itzik and Gelbard Roy. Does agile methodology fit all characteristics of software projects? Review and analysis. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10334-7`.

Vidoni:2023:TTR

[1486] Melina Vidoni and Zadia Codabux. Towards a taxonomy of Roxygen documentation in R packages. *Empirical Software Engineering*, 28(4):??, July 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10345-4`.

Sun:2023:UUG

[1487] Yiming Sun, Daniel German, and Stefano Zacchiroli. Using the uniqueness of global identifiers to determine the

provenance of Python software source code. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10317-8`.

Aman:2023:ADC

[1488] Hirohisa Aman, Sousuke Amasaki, Tomoyuki Yokogawa, and Minoru Kawahara. An automated detection of confusing variable pairs with highly similar compound names in Java and Python programs. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10339-2`.

Masood:2023:WWL

[1489] Zainab Masood, Kelly Blincoe, and Daniela Damian. What have we learned? A conceptual framework on New Zealand software professionals and companies' response to COVID-19. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10309-8`.

Pazos:2023:XAS

[1490] José Carlos Pazos, Jean-Sébastien Légaré, and Ivan Beschastnikh. XSnare: application-specific client-side cross-site scripting protection. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10323-w`.

Mindom:2023:CRL

[1491] Paulina Stevia Nouwou Mindom, Amin Nikanjam, and Foutse Khomh. A comparison of reinforcement learning frameworks for software testing tasks. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10363-2`.

Piantadosi:2023:DAM

[1492] Valentina Piantadosi, Simone Scalabrino, Alexander Serebrenik, Nicole Novielli, and Rocco Oliveto. Do attention and memory explain the performance of software developers? *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10316-9`.

Chen:2023:PCW

[1493] Yihao Chen, Eduardo Fernandes, Bram Adams, and Ahmed E. Hassan. On practitioners' concerns when adopting service mesh frameworks. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10348-1`.

Berntzen:2023:RCT

[1494] Marthe Berntzen, Viktoria Stray, Nils Brede Moe, and Rashina Hoda.

Responding to change over time: a longitudinal case study on changes in coordination mechanisms in large-scale agile. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10349-0`.

Bjarnason:2023:EBM

[1495] Elizabeth Bjarnason, Franz Lang, and Alexander Mjöberg. An empirically based model of software prototyping: a mapping study and a multi-case study. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10331-w`.

Santos:2023:TIA

[1496] Fabio Santos, Joseph Vargovich, Bianca Trinkenreich, Italo Santos, Jacob Penney, Ricardo Britto, João Felipe Pimentel, Igor Wiese, Igor Steinmacher, Anita Sarma, and Marco A. Gerosa. Tag that issue: applying API-domain labels in issue tracking systems. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10329-4`.

Alaboudi:2023:WCD

[1497] Abdulaziz Alaboudi and Thomas D. LaToza. What constitutes debugging? An exploratory study of debugging episodes. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10352-5`.

Piskachev:2023:CCS

[1498] Goran Piskachev, Matthias Becker, and Eric Bodden. Can the configuration of static analyses make resolving security vulnerabilities more effective? — A user study. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10354-3`.

Chen:2023:SDC

[1499] Xiangping Chen, Peiyong Liao, Queping Kong, Yuan Huang, and Xiaocong Zhou. Studying differentiated code to support smart contract update. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10359-y`.

Sharma:2023:IDP

[1500] Tushar Sharma, Stefanos Georgiou, Maria Kechagia, Taher A. Ghaleb, and Federica Sarro. Investigating developers' perception on software testability and its effects. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10373-0`.

Cabral:2023:IOO

[1501] George G. Cabral, Leandro L. Minku, Adriano L. I. Oliveira, Dinaldo A. Pessoa, and Sadia Tabassum. An investigation of online and offline learning models for online Just-in-Time Software Defect Prediction. *Empirical Software Engineering*, 28(5): ??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10335-6`. See correction [1642].

Ernst:2023:SDS

[1502] Neil A. Ernst and Martin P. Robillard. A study of documentation for software architecture. *Empirical Software Engineering*, 28(5): ??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10347-2`.

Wang:2023:MTR

[1503] Dong Wang, Tao Xiao, Teyon Son, Raula Gaikovina Kula, Takashi Ishio, Yasutaka Kamei, and Kenichi Matsumoto. More than react: Investigating the role of emoji reaction in GitHub pull requests. *Empirical Software Engineering*, 28(5): ??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10336-5`.

Song:2023:VRP

[1504] Liyan Song, Leandro L. Minku, and Xin Yao. On the validity of retrospective predictive performance evaluation procedures in just-in-time software defect prediction. *Empirical Software Engineering*, 28(5): ??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10341-8`.

Kaleeswaran:2023:USE

[1505] Arut Prakash Kaleeswaran, Arne Nordmann, Thomas Vogel, and Lars Grunske. A user study for evaluation of formal verification results and their explanation at Bosch. *Empirical Software Engineering*, 28(5): ??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10353-4`.

Gao:2023:EES

[1506] Yuexiu Gao, Hongyu Zhang, and Chen Lyu. EnCoSum: enhanced semantic features for multi-scale multi-modal source code summarization. *Empirical Software Engineering*, 28(5): ??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10384-x`.

Song:2023:ADA

[1507] Hengjie Song, Guobin Wu, Le Ma, Yufei Pan, Qingan Huang, and Siyu Jiang. Adversarial domain adaptation for cross-project defect prediction. *Empirical Software Engineering*, 28(5):??, September 2023. CODEN ESENFW. ISSN 1382-3256 (print),

1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10371-2.

Borstler:2023:DTA

[1508] Jürgen Börstler, Kwabena E. Bennin, Sara Hooshangi, Johan Jeuring, Hieke Keuning, Carsten Kleiner, Bonnie MacKellar, Rodrigo Duran, Harald Störrle, Daniel Toll, and Jelle van Assema. Developers talking about code quality. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10381-0.

Asare:2023:GCB

[1509] Owura Asare, Meiyappan Nagappan, and N. Asokan. Is GitHub's Copilot as bad as humans at introducing vulnerabilities in code? *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10380-1.

Shar:2023:ECF

[1510] Lwin Khin Shar, Biniam Fisseha Demissie, Mariano Ceccato, Yan Naing Tun, David Lo, Lingxiao Jiang, and Christoph Bienert. Experimental comparison of features, analyses, and classifiers for Android malware detection. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10375-y.

Wessel:2023:GAI

[1511] Mairieli Wessel, Joseph Vargovich, Marco A. Gerosa, and Christoph Treude. GitHub Actions: The impact on the pull request process. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10369-w.

Bogner:2023:DRA

[1512] Justus Bogner, Sebastian Kotstein, and Timo Pfaff. Do RESTful API design rules have an impact on the understandability of Web APIs? *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10367-y.

Wen:2023:ESS

[1513] Ming Wen, Yongcong Wang, Yifan Xia, and Hai Jin. Evaluating seed selection for fuzzing JavaScript engines. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-023-10340-9.

Obie:2023:ADC

[1514] Humphrey O. Obie, Hung Du, Kashumi Madampe, Mojtaba Shahin, Idowu Ilekura, John Grundy, Li Li, Jon Whittle, Burak Turhan, and Hourieh Khalajzadeh. Automated detection, categorisation and developers' experience with the violations

of honesty in mobile apps. *Empirical Software Engineering*, 28(6): ??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10361-4`.

Shi:2023:CRS

[1515] Ensheng Shi, Yanlin Wang, Lun Du, Hongyu Zhang, Shi Han, Dongmei Zhang, and Hongbin Sun. CoCoAST: Representing source code via hierarchical splitting and reconstruction of abstract syntax trees. *Empirical Software Engineering*, 28(6): ??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10378-9`.

Guglielmi:2023:UGV

[1516] Emanuela Guglielmi, Simone Scalabrino, Gabriele Bavota, and Rocco Oliveto. Using gameplay videos for detecting issues in video games. *Empirical Software Engineering*, 28(6): ??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10365-0`.

Wu:2023:ELR

[1517] Xingfang Wu, Heng Li, and Foutse Khomh. On the effectiveness of log representation for log-based anomaly detection. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10364-1`.

Wang:2023:WCT

[1518] Dong Wang, Masanari Kondo, Yasutaka Kamei, Raula Gaikovina Kula, and Naoyasu Ubayashi. When conversations turn into work: a taxonomy of converted discussions and issues in GitHub. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10366-z`.

Paramitha:2023:TLA

[1519] Ranindya Paramitha and Fabio Massacci. Technical leverage analysis in the Python ecosystem. *Empirical Software Engineering*, 28(6): ??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10355-2`.

Doredvic:2023:COG

[1520] Milica Đorević, Michel Albonico, Grace A. Lewis, Ivano Malavolta, and Patricia Lago. Computation offloading for ground robotic systems communicating over WiFi – an empirical exploration on performance and energy trade-offs. *Empirical Software Engineering*, 28(6): ??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10351-6`.

Yang:2023:SGM

[1521] Guang Yang, Yu Zhou, Xiang Chen, Xiangyu Zhang, Yiran Xu, Tingting

Han, and Taolue Chen. A syntax-guided multi-task learning approach for Turducken-style code generation. *Empirical Software Engineering*, 28 (6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10372-1`.

Khairunnesa:2023:WKC

[1522] Samantha Syeda Khairunnesa, Shibbir Ahmed, Sayem Mohammad Imtiaz, Hridesh Rajan, and Gary T. Leavens. What kinds of contracts do ML APIs need? *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10320-z`.

Aghili:2023:SCA

[1523] Roozbeh Aghili, Heng Li, and Foutse Khomh. Studying the characteristics of AIOps projects on GitHub. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10382-z`.

Yu:2023:ANT

[1524] Liang Yu, Emil Alégroth, Panagiota Chatzipetrou, and Tony Gorschek. Automated NFR testing in continuous integration environments: a multi-case study of Nordic companies. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10356-1`.

Bree:2023:EEV

[1525] Déaglán Connolly Bree and Mel Ó Cinnéide. Energy efficiency of the Visitor Pattern: contrasting Java and C++ implementations. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10387-8`.

Weiss:2023:GDT

[1526] Michael Weiss, André García Gómez, and Paolo Tonella. Generating and detecting true ambiguity: a forgotten danger in DNN supervision testing. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10393-w`.

Gonzalez-Barahona:2023:SHL

[1527] Jesus M. Gonzalez-Barahona, Sergio Montes-Leon, Gregorio Robles, and Stefano Zacchiroli. The Software Heritage License Dataset (2022 edition). *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10377-w`.

Ribeiro:2023:IEC

[1528] Talita Vieira Ribeiro, Paulo Sérgio Medeiros dos Santos, and Guilherme Horta Travassos. On the investigation of

empirical contradictions — aggregated results of local studies on readability and comprehensibility of source code. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10360-5`.

Chakraborty:2023:WDU

[1529] Shalini Chakraborty and Grischa Liebel. We do not understand what it says – studying student perceptions of software modelling. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10404-w`.

Weeraddana:2023:ECE

[1530] Nimmi Rashinika Weeraddana, Xiaoyan Xu, Mahmoud Alfadel, Shane McIntosh, and Meiyappan Nagappan. An empirical comparison of ethnic and gender diversity of DevOps and non-DevOps contributions to open-source projects. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10394-9`.

Lin:2023:CVF

[1531] Jiahuei Lin, Bram Adams, and Ahmed E. Hassan. On the coordination of vulnerability fixes. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10403-x`.

Kaltenecker:2023:PEC

[1532] Christian Kaltenecker, Stefan Mühlbauer, Alexander Grebhahn, Norbert Siegmund, and Sven Apel. Performance evolution of configurable software systems: an empirical study. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10338-3`.

Hartel:2023:OVE

[1533] Johannes Härtel and Ralf Lämmel. Operationalizing validity of empirical software engineering studies. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10370-3`.

Moreira:2023:ABI

[1534] Caique G. Moreira, Breno B. N. de França, and Tayana U. Conte. Analyzing the BizDev interface in an enterprise context: a case of developers acting in business. *Empirical Software Engineering*, 28(6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10383-y`.

Lavazza:2023:ESS

[1535] Luigi Lavazza, Sandro Morasca, and Marco Gatto. An empirical study

on software understandability and its dependence on code characteristics. *Empirical Software Engineering*, 28 (6):??, November 2023. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10396-7`.

Keshani:2024:FFL

[1536] Mehdi Keshani, Georgios Gousios, and Sebastian Proksch. Frankenstein: fast and lightweight call graph generation for software builds. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10388-7`.

Castanyer:2024:WDD

[1537] Roger Creus Castanyer, Silverio Martínez-Fernández, and Xavier Franch. Which design decisions in AI-enabled mobile applications contribute to greener AI? *Empirical Software Engineering*, 29(1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10407-7`.

Baldassarre:2024:GES

[1538] Maria Teresa Baldassarre and Marcos Kalinowski. Guest editorial: special issue on empirical software engineering and measurement. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10357-0`.

Fu:2024:APT

[1539] Michael Fu, Chakkrit Tantithamthavorn, Trung Le, Yuki Kume, Van Nguyen, Dinh Phung, and John Grundy. AIBugHunter: a practical tool for predicting, classifying and repairing software vulnerabilities. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10346-3`.

Tan:2024:DOC

[1540] Wen Siang Tan, Markus Wagner, and Christoph Treude. Detecting outdated code element references in software repository documentation. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10397-6`.

Turzo:2024:WMC

[1541] Asif Kamal Turzo and Amiangshu Bosu. What makes a code review useful to OpenDev developers? An empirical investigation. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10411-x`.

Kudrjavets:2024:DCR

[1542] Gunnar Kudrjavets and Ayushi Rastogi. Does code review speed

matter for practitioners? *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10401-z`.

Khan:2024:ISD

[1543] Arif Ali Khan, Javed Ali Khan, Muhammad Azeem Akbar, Peng Zhou, and Mahdi Fahmideh. Insights into software development approaches: mining Q&A repositories. *Empirical Software Engineering*, 29 (1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10417-5`.

Ferrara:2024:FAM

[1544] Carmine Ferrara, Giulia Sellitto, Filomena Ferrucci, Fabio Palomba, and Andrea De Lucia. Fairness-aware machine learning engineering: how far are we? *Empirical Software Engineering*, 29(1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10402-y`.

Tambon:2024:SBD

[1545] Florian Tambon, Amin Nikanjam, Le An, Foutse Khomh, and Giuliano Antoniol. Silent bugs in deep learning frameworks: an empirical study of Keras and TensorFlow. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10389-6`.

Bajaj:2024:UBT

[1546] Rahul Bajaj, Eduardo Fernandes, Bram Adams, and Ahmed E. Hassan. Unreproducible builds: time to fix, causes, and correlation with external ecosystem factors. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10399-4`.

Sas:2024:MGS

[1547] Cezar Sas and Andrea Capiluppi. Multi-granular software annotation using file-level weak labelling. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10423-7`.

Soud:2024:FOE

[1548] Majd Soud, Grischa Liebel, and Mohammad Hamdaqa. A fly in the ointment: an empirical study on the characteristics of Ethereum smart contract code weaknesses. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10398-5`.

Morovati:2024:BCM

[1549] Mohammad Mehdi Morovati, Amin Nikanjam, Florian Tambon, Foutse

Khomh, and Zhen Ming Jiang. Bug characterization in machine learning-based systems. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10400-0`.

Tomova:2024:AUT

[1550] Mihaela Tomova, Martin Hofmann, Constantin Hütterer, and Patrick Mäder. Assessing the utility of text-to-SQL approaches for satisfying software developer information needs. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10374-z`.

Reinhartz-Berger:2024:CSM

[1551] Iris Reinhartz-Berger. Challenges in software model reuse: cross application domain vs. cross modeling paradigm. *Empirical Software Engineering*, 29 (1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10386-9`.

Guzman:2024:MGG

[1552] Emitzá Guzmán, Ricarda Anna-Lena Fischer, and Janey Kok. Mind the gap: gender, micro-inequities and barriers in software development. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10379-8`.

Bui:2024:AES

[1553] Quang-Cuong Bui, Ranindya Paramitha, Duc-Ly Vu, Fabio Massacci, and Riccardo Scandariato. APR4Vul: an empirical study of automatic program repair techniques on real-world Java vulnerabilities. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10415-7`.

Guizzo:2024:MAE

[1554] Giovani Guizzo, Jie M. Zhang, Federica Sarro, Christoph Treude, and Mark Harman. Mutation analysis for evaluating code translation. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10385-w`.

Giordano:2024:AES

[1555] Giammaria Giordano, Gerardo Festa, Gemma Catolino, Fabio Palomba, Filomena Ferrucci, and Carmine Gravino. On the adoption and effects of source code reuse on defect proneness and maintenance effort. *Empirical Software Engineering*, 29(1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10408-6`.

Ros:2024:TFA

[1556] Rasmus Ros, Elizabeth Bjarnason, and Per Runeson. A theory of factors affecting continuous experimentation (FACE). *Empirical Software Engineering*, 29(1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10358-z`.

Openja:2024:DEB

[1557] Moses Openja, Gabriel Laberge, and Foutse Khomh. Detection and evaluation of bias-inducing features in machine learning. *Empirical Software Engineering*, 29(1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10409-5`.

Babur:2024:LUA

[1558] Önder Babur, Eleni Constantinou, and Alexander Serebrenik. Language usage analysis for EMF metamodels on GitHub. *Empirical Software Engineering*, 29(1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10368-x`.

Vale:2024:PMC

[1559] Gustavo Vale, Heitor Costa, and Sven Apel. Predicting merge conflicts considering social and technical assets. *Empirical Software Engineering*, 29(1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10395-8`.

Nikolaidis:2024:MBA

[1560] Nikolaos Nikolaidis, Nikolaos Mittas, Apostolos Ampatzoglou, Daniel Feitosa, and Alexander Chatzigeorgiou. A metrics-based approach for selecting among various refactoring candidates. *Empirical Software Engineering*, 29(1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10412-w`.

Liaskos:2024:ICC

[1561] Sotirios Liaskos. On the intuitive comprehensibility of contribution links in goal models: an experimental study. *Empirical Software Engineering*, 29(1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10376-x`.

Putta:2024:STL

[1562] Abheeshta Putta, Maria Paasivaara, and Casper Lassenius. SAFe transformation in a large financial corporation. *Empirical Software Engineering*, 29(1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10420-w`.

Ardalani:2024:SSR

[1563] Alireza Ardalani, Saeed Parsa, Morteza Zakeri-Nasrabadi, and Alexander Chatzigeorgiou. Supporting single responsibility through automated

extract method refactoring. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10427-3`.

Chouchen:2024:MOE

[1564] Moataz Chouchen and Ali Ouni. A multi-objective effort-aware approach for early code review prediction and prioritization. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10431-7`.

Marcilio:2024:LPA

[1565] Diego Marcilio and Carlo A. Furia. Lightweight precise automatic extraction of exception preconditions in Java methods. *Empirical Software Engineering*, 29(1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10392-x`.

Rua:2024:LSE

[1566] Rui Rua and João Saraiva. A large-scale empirical study on mobile performance: energy, run-time and memory. *Empirical Software Engineering*, 29(1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10391-y`.

Hidellaarachchi:2024:IPR

[1567] Dulaji Hidellaarachchi, John Grundy, Rashina Hoda, and Ingo Mueller. The impact of personality on requirements engineering activities: a mixed-methods study. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10426-4`.

Ahasanuzzaman:2024:UKU

[1568] Md Ahasanuzzaman, Gustavo A. Oliva, and Ahmed E. Hassan. Using knowledge units of programming languages to recommend reviewers for pull requests: an empirical study. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10421-9`.

Rahman:2024:EST

[1569] Akond Rahman, Dibyendu Brinto Bose, Yue Zhang, and Rahul Pandita. An empirical study of task infections in Ansible scripts. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10432-6`.

Zhu:2024:WAS

[1570] Wenhan Zhu, Sebastian Proksch, Daniel M. German, Michael W. Godfrey, Li Li, and Shane McIntosh.

What is an app store? The software engineering perspective. *Empirical Software Engineering*, 29(1): ??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10362-3`.

Hort:2024:SBA

[1571] Max Hort, Jie M. Zhang, Federica Sarro, and Mark Harman. Search-based automatic repair for fairness and accuracy in decision-making software. *Empirical Software Engineering*, 29(1):??, January 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10419-3`.

Murali:2024:DIA

[1572] Aniruddhan Murali, Gaurav Sahu, Kishanthan Thangarajah, Brian Zimmerman, Gema Rodríguez-Pérez, and Meiyappan Nagappan. Diversity in issue assignment: humans vs bots. *Empirical Software Engineering*, 29 (2):??, March 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10424-6`.

Felici:2024:HGS

[1573] Riccardo Felici, Laura Pozzi, and Carlo A. Furia. HyperPUT: generating synthetic faulty programs to challenge bug-finding tools. *Empirical Software Engineering*, 29(2): ??, March 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10430-8`.

Xiao:2024:ESU

[1574] Lu Xiao, Gengwu Zhao, Xiao Wang, Keye Li, Erick Lim, Chenhao Wei, Tingting Yu, and Xiaoyin Wang. An empirical study on the usage of mocking frameworks in Apache Software Foundation. *Empirical Software Engineering*, 29(2):??, March 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10410-y`.

Toro:2024:EGB

[1575] Amador Durán Toro, Pablo Fernández, Nathaniel Weinman, Aslıhan Akalın, and Armando Fox. Exploring gender bias in remote pair programming among software engineering students: The twincode original study and first external replication. *Empirical Software Engineering*, 29(2): ??, March 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10416-6`.

Timperley:2024:RBR

[1576] Christopher S. Timperley, Gijs van der Hoorn, André Santos, Harshavardhan Deshpande, and Andrzej Wąsowski. ROBUST: 221 bugs in the robot operating system. *Empirical Software Engineering*, 29(3):??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10440-0`.

Jabrayilzade:2024:TIC

[1577] Elgun Jabrayilzade, Ayda Yurtoğlu, and Eray Tüzün. Taxonomy of inline code comment smells. *Empirical Software Engineering*, 29(3): ??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10425-5`.

Alazba:2024:CTB

[1578] Amal Alazba, Hamoud Aljamaan, and Mohammad Alshayeb. CoRT: Transformer-based code representations with self-supervision by predicting reserved words for code smell detection. *Empirical Software Engineering*, 29(3):??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10445-9`.

Lai:2024:CAR

[1579] Tuan Dung Lai, Anj Simmons, Scott Barnett, Jean-Guy Schneider, and Rajesh Vasa. Comparative analysis of real issues in open-source machine learning projects. *Empirical Software Engineering*, 29(3):??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10467-3`.

DeStefano:2024:ESE

[1580] Manuel De Stefano, Dario Di Nucci, Fabio Palomba, and Andrea De Lucia. An empirical study into the effects of transpilation on quantum circuit smells. *Empirical Software Engineering*, 29(3):??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10461-9`.

Guerra:2024:HDA

[1581] Eduardo Guerra, Everaldo Gomes, Jeferson Ferreira, Igor Wiese, Phyllipe Lima, Marco Gerosa, and Paulo Meirelles. How do annotations affect Java code readability? *Empirical Software Engineering*, 29(3): ??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10460-w`.

Yang:2024:ABM

[1582] Shaoyu Yang, Xiang Chen, Ke Liu, Guang Yang, and Chi Yu. Automatic bi-modal question title generation for Stack Overflow with prompt learning. *Empirical Software Engineering*, 29(3):??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10466-4`.

Chen:2024:VFA

[1583] Junren Chen, Cheng Huang, and Jiaxuan Han. VioDroid-Finder: automated evaluation of compliance and consistency for Android apps. *Empirical Software Engineering*, 29 (3):??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10470-8`.

Eng:2024:PMC

[1584] Kalvin Eng, Abram Hindle, and Eleni Stroulia. Patterns of multi-container composition for service orchestration with Docker Compose. *Empirical Software Engineering*, 29 (3):??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10462-8`.

Maes-Bermejo:2024:HBT

[1585] Michel Maes-Bermejo, Alexander Serebrenik, Micael Gallego, Francisco Gortázar, Gregorio Robles, and Jesús María González Barahona. Hunting bugs: Towards an automated approach to identifying which change caused a bug through regression testing. *Empirical Software Engineering*, 29(3):??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10479-z`.

Pant:2024:EAT

[1586] Aastha Pant, Rashina Hoda, Chakkrit Tantithamthavorn, and Burak Turhan. Ethics in AI through the practitioner's view: a grounded theory literature review. *Empirical Software Engineering*, 29(3):??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10465-5`.

Wimalasooriya:2024:JTC

[1587] Chathrie Wimalasooriya, Sherlock A. Licorish, Daniel Alencar da Costa, and Stephen G. MacDonell. Just-in-time crash prediction for mobile apps. *Empirical Software Engineering*, 29(3):??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10455-7`.

Lin:2024:ARF

[1588] Yan Lin, Trisha Singhal, Debin Gao, and David Lo. Analyzing and revivifying function signature inference using deep learning. *Empirical Software Engineering*, 29(3):??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10453-9`.

Khalili:2024:SMG

[1589] Farideh Khalili, Leonardo Mariani, Ali Mohebbi, Mauro Pezzè, and Valerio Terragni. Semantic matching in GUI test reuse. *Empirical Software Engineering*, 29(3):??, May 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10406-8`.

Pecorelli:2024:TGS

[1590] Fabiano Pecorelli, Giovanni Grano, Fabio Palomba, Harald C. Gall, and Andrea De Lucia. Toward granular search-based automatic unit test case generation. *Empirical Software Engineering*, 29(4):??, July 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10451-x`.

Biagiola:2024:TBT

[1591] Matteo Biagiola, Andrea Stocco, Vincenzo Riccio, and Paolo Tonella. Two is better than one: digital siblings to improve autonomous driving testing. *Empirical Software Engineering*, 29(4):??, July 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10458-4`.

Leven:2024:BWT

[1592] William Levén, Hampus Broman, Terese Besker, and Richard Torkar. The broken windows theory applies to technical debt. *Empirical Software Engineering*, 29(4):??, July 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10456-6`.

Idowu:2024:MLE

[1593] Samuel Idowu, Osman Osman, Daniel Strüber, and Thorsten Berger. Machine learning experiment management tools: a mixed-methods empirical study. *Empirical Software Engineering*, 29(4):??, July 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10444-w`.

Verwijs:2024:DAS

[1594] Christiaan Verwijs and Daniel Russo. Do agile scaling approaches make a difference? An empirical comparison of team effectiveness across popular scaling approaches. *Empirical Software Engineering*, 29(4):??, July 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10481-5`.

Wu:2024:CAC

[1595] Jianyu Wu, Hao He, Kai Gao, Wenxin Xiao, Jingyue Li, and Minghui Zhou. A comprehensive analysis of challenges and strategies for software release notes on GitHub. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10486-0`.

Hadadi:2024:SED

[1596] Fatemeh Hadadi, Joshua H. Dawes, Donghwan Shin, Domenico Bianculli, and Lionel Briand. Systematic evaluation of deep learning models for log-based failure prediction. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10501-4`.

Abidi:2024:DSM

[1597] Mouna Abidi, Md Saidur Rahman, Moses Openja, and Foutse Khomh. Design smells in multi-language systems and bug-proneness: a survival analysis. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10476-2`.

Ghadesi:2024:WCE

[1598] Amin Ghadesi, Maxime Lamothe, and Heng Li. What causes exceptions in machine learning applications? Mining machine learning-related stack traces on Stack Overflow. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10499-9`.

Rosa:2024:FDS

[1599] Giovanni Rosa, Federico Zappone, Simone Scalabrino, and Rocco Oliveto. Fixing Dockerfile smells: an empirical study. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10471-7`.

Arabat:2024:ESC

[1600] Ali Arabat and Mohammed Sayagh. An empirical study on cross-component dependent changes: a case study on the components of OpenStack. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10488-y`.

Zheng:2024:DUB

[1601] Shenyu Zheng, Bram Adams, and Ahmed E. Hassan. Does using Bazel help speed up continuous integration builds? *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10497-x`.

Li:2024:PTC

[1602] Yinghua Li, Xueqi Dang, Lei Ma, Jacques Klein, and Tegawendé F. Bissyandé. Prioritizing test cases for deep learning-based video classifiers. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10520-1`.

Dang:2024:TEL

[1603] Xueqi Dang, Yinghua Li, Wei Ma, Yuejun Guo, Qiang Hu, Mike Papadakis, Maxime Cordy, and Yves Le Traon. Towards exploring the limitations of test selection techniques on graph neural networks: an empirical study. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10515-y`.

Napier:2024:EPP

[1604] Kollin Napier, Tanmay Bhowmik, and Zhiqian Chen. Explaining poor performance of text-based machine learning models for vulnerability detection. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10519-8`.

Alami:2024:FOS

[1605] Adam Alami, Raúl Pardo, and Johan Linåker. Free open source communities sustainability: Does it make a difference in software quality? *Empirical Software Engineering*, 29(5): ??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10529-6`.

Rani:2024:RSA

[1606] Pooja Rani, Fernando Petrulio, and Alberto Bacchelli. On refining the SZZ algorithm with bug discussion data. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10511-2`.

Martinez:2024:TBP

[1607] Matias Martinez, Maria Kechagia, Anjana Perera, Justyna Petke, Federica Sarro, and Aldeida Aleti. Test-based patch clustering for automatically-generated patches assessment. *Empirical Software Engineering*, 29(5): ??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10503-2`.

Arusoaie:2024:TTS

[1608] Andrei Arusoaie and Ştefan-Claudiu Susan. Towards trusted smart contracts: a comprehensive test suite for vulnerability detection. *Empirical Software Engineering*, 29(5): ??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10509-w`.

Guo:2024:NIA

[1609] Hongjing Guo, Chuanqi Tao, and Zhiqiu Huang. Neuron importance-aware coverage analysis for deep neural network testing. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10524-x`.

Alami:2024:RPS

[1610] Adam Alami, Mansooreh Zahedi, and Oliver Krancher. The role of psychological safety in promoting software quality in agile teams. *Empirical Software Engineering*, 29(5): ??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10512-1`.

Chen:2024:ATC

[1611] Xiang Chen, Wenlong Pei, Shaoyu Yang, Yanlin Zhou, Zichen Zhang, and Jiahua Pei. Automatic title completion for Stack Overflow posts and GitHub issues. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10513-0`.

Danglot:2024:CWS

[1612] Benjamin Danglot, Jean-Rémy Falleri, and Romain Rouvoy. Can we spot energy regressions using developers tests? *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10429-1`.

Chen:2024:ESP

[1613] Bingting Chen, Weiqin Zou, Biyu Cai, Qianshuang Meng, Wenjie Liu, Piji Li, and Lin Chen. An empirical study on the potential of word embedding techniques in bug report management tasks. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10510-3`.

Ouatiti:2024:ICD

[1614] Youssef Esseddiq Ouatiti, Mohammed Sayagh, Noureddine Kerzazi, Bram Adams, and Ahmed E. Hassan. The impact of concept drift and data leakage on log level prediction models. *Empirical Software Engineering*, 29 (5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10518-9`.

Tang:2024:ARD

[1615] Xunzhu Tang, Haoye Tian, Pingfan Kong, Saad Ezzini, Kui Liu, Xin Xia, Jacques Klein, and Tegawendé F. Bissyandé. App review driven collaborative bug finding. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10489-x`. See correction [1691].

Setubal:2024:IOR

[1616] Miguel Setúbal, Tayana Conte, Marcos Kalinowski, and Allysson Allex Araújo. Investigating the online recruitment and selection journey of novice software engineers: Anti-patterns and recommendations. *Empirical Software Engineering*, 29(5): ??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10498-w`.

Borg:2024:AAB

[1617] Markus Borg, Leif Jonsson, Emelie Engström, Béla Bartalos, and Attila Szabó. Adopting automated bug assignment in practice — a longitudinal case study at Ericsson. *Empirical Software Engineering*, 29(5): ??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10507-y`.

Maes-Bermejo:2024:TPC

[1618] Michel Maes-Bermejo, Micael Gallego, Francisco Gortázar, Gregorio Robles, and Jesus M. Gonzalez-Barahona. Testing the past: can we still run tests in past snapshots for Java projects? *Empirical Software Engineering*, 29 (5):??, September 2024. CODEN

ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10530-z.

Rebatchi:2024:DSP

[1619] Hocine Rebatchi, Tégawendé F. Bissyandé, and Naouel Moha. Dependabot and security pull requests: large empirical study. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10523-y.

Jiang:2024:DIR

[1620] Mingyue Jiang, Chengjian Tang, Xiao-Yi Zhang, Yangyang Zhao, and Zuohua Ding. DDImage: an image reduction based approach for automatically explaining black-box classifiers. *Empirical Software Engineering*, 29 (5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10505-0.

Laiq:2024:IAM

[1621] Muhammad Laiq, Nauman bin Ali, Jürgen Börstler, and Emelie Engström. Industrial adoption of machine learning techniques for early identification of invalid bug reports. *Empirical Software Engineering*, 29(5): ??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10502-3.

Sahar:2024:ISO

[1622] Hareem Sahar, Abdul Ali Bangash, Abram Hindle, and Denilson Barbosa. IRJIT: a simple, online, information retrieval approach for just-in-time software defect prediction. *Empirical Software Engineering*, 29(5): ??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10514-z.

Papotti:2024:ACR

[1623] Aurora Papotti, Ranindya Paramitha, and Fabio Massacci. On the acceptance by code reviewers of candidate security patches suggested by Automated Program Repair tools. *Empirical Software Engineering*, 29(5): ??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10506-z.

Rio:2024:CIS

[1624] Américo Rio, Fernando Brito e Abreu, and Diana Mendes. Causal inference of server- and client-side code smells in web apps evolution. *Empirical Software Engineering*, 29(5): ??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10478-0.

Hanenberg:2024:IRT

[1625] Stefan Hanenberg, Johannes Morzeck, and Volker Gruhn. Indentation and reading time: a randomized

control trial on the differences between generated indented and non-indented if-statements. *Empirical Software Engineering*, 29(5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10531-y`.

Kruger:2024:GUF

[1626] Jacob Krüger, Gül Çalıklı, Dmitri Bershadskyy, Siegmar Otto, Sarah Zabel, and Robert Heyer. Guidelines for using financial incentives in software-engineering experimentation. *Empirical Software Engineering*, 29 (5):??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10517-w`.

Venkatesh:2024:SAD

[1627] Ashwin Prasad Shivarpatna Venkatesh, Samkutty Sabu, Mouli Chekkapalli, Jiawei Wang, Li Li, and Eric Bodden. Static analysis driven enhancements for comprehension in machine learning notebooks. *Empirical Software Engineering*, 29(5): ??, September 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10525-w`.

Kitchenham:2024:RAM

[1628] Barbara Kitchenham and Lech Madeyski. Recommendations for analysing and meta-analysing small sample size software engineering experiments. *Empirical Software Engineering*, 29(6): ??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10504-1`.

Tjikhoeri:2024:BEB

[1629] Neelam Tjikhoeri, Lauren Olson, and Emitzá Guzmán. The best ends by the best means: ethical concerns in app reviews. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10463-7`.

Khan:2024:ILP

[1630] Zanis Ali Khan, Donghwan Shin, Domenico Bianculli, and Lionel C. Briand. Impact of log parsing on deep learning-based anomaly detection. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10533-w`.

Bauer:2024:ATS

[1631] Andreas Bauer, Julian Frattini, and Emil Alégroth. Augmented testing to support manual GUI-based regression testing: An empirical study. *Empirical Software Engineering*, 29(6): ??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10522-z`.

Rocha:2024:HDP

[1632] Larissa Rocha, Edna Dias Canedo, Claudia Pinto Pereira, Carla Bezerra,

and Fabiana Freitas Mendes. How does parenthood affect an ICT practitioner's work? A survey study with fathers. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10534-9`.

Jiang:2024:CPD

[1633] Wenxin Jiang, Vishnu Banna, Naveen Vivek, Abhinav Goel, Nicholas Synovic, George K. Thiruvathukal, and James C. Davis. Challenges and practices of deep learning model reengineering: a case study on computer vision. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10521-0`.

Niu:2024:ERS

[1634] Feifei Niu, Enshuo Zhang, Christoph Mayr-Dorn, Wesley Klewerton Guez Assunção, Liguo Huang, Jidong Ge, Bin Luo, and Alexander Egyed. An extensive replication study of the ABLoTS approach for bug localization. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10537-6`.

Muse:2024:DAP

[1635] Biruk Asmare Muse, Kawser Wazed Nafi, Foutse Khomh, and Giuliano Antoniol. Data-access performance anti-patterns in data-intensive systems. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10535-8`.

Kamath:2024:CCG

[1636] Divya M. Kamath, Eduardo Fernandes, Bram Adams, and Ahmed E. Hassan. On combining commit grouping and build skip prediction to reduce redundant continuous integration activity. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10477-1`.

Agh:2024:SPL

[1637] Halimeh Agh, Aidin Azamnouri, and Stefan Wagner. Software product line testing: a systematic literature review. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10516-x`.

Etaiwi:2024:CTI

[1638] Layan Etaiwi, Pascal Sager, Yann-Gaël Guéhéneuc, and Sylvie Hamel. Consensus task interaction trace recommender to guide developers' software navigation. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10528-7`.

Kondo:2024:EST

[1639] Masanari Kondo, Daniel M. German, Yasutaka Kamei, Naoyasu Ubayashi, and Osamu Mizuno. An empirical study of token-based micro commits. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10527-8`.

Cote:2024:QIM

[1640] Pierre-Olivier Côté, Amin Nikanjam, Rached Bouchoucha, Ilan Basta, Mouna Abidi, and Foutse Khomh. Quality issues in machine learning software systems. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10536-7`.

Hao:2024:ESD

[1641] Huizi Hao, Kazi Amit Hasan, Hong Qin, Marcos Macedo, Yuan Tian, Steven H. H. Ding, and Ahmed E. Hassan. An empirical study on developers' shared conversations with ChatGPT in GitHub pull requests and issues. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10540-x`.

Cabral:2024:CIO

[1642] George G. Cabral, Leandro L. Minku, Adriano L. I. Oliveira, Dinaldo A. Pessoa, and Sadia Tabassum. Correction to: An investigation of online and offline learning models for online just-in-time software defect prediction. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-023-10422-8`. See [1501].

Malcher:2024:IUF

[1643] Paulo Malcher, Davi Viana, Pablo Oliveira Antonino, and Rodrigo Pereira dos Santos. Investigating user feedback from a crowd in requirements management in software ecosystems. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10546-5`.

Ayala:2024:FSI

[1644] Claudia Ayala, Cristina Gómez, Martí Manzano, Antonin Abherve, and Xavier Franch. Forecasting software indicators: an industry-academia collaboration. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10508-x`.

Weng:2024:SIT

[1645] Shihao Weng, Yang Feng, Yining Yin, Yuxuan Dai, Jia Liu, and Zhihong Zhao. Seeing the invisible: test prioritization for object detection system. *Empirical Software Engineering*,

29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10539-4.

Koana:2024:EOM

[1646] Umme Ayman Koana, Quang Hy Le, Shadikur Rahman, Chris Carlson, Francis Chew, and Maleknaz Nayebi. Examining ownership models in software teams. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10538-5. See correction [1659].

Alfieri:2024:EUP

[1647] Costanza Alfieri, Juri Di Rocco, Paola Inverardi, and Phuong T. Nguyen. Exploring user privacy awareness on GitHub: an empirical study. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10544-7.

Yang:2024:PIU

[1648] Lanxin Yang, He Zhang, Jinwei Xu, Jun Lyu, Xin Zhou, Dong Shao, Shan Gao, and Alberto Bacchelli. A preliminary investigation on using multi-task learning to predict change performance in code reviews. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10526-9. See correction [1708].

Teng:2024:OCP

[1649] Cong Teng, Liyan Song, and Xin Yao. Online cross-project approach with project-level similarity for just-in-time software defect prediction. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10551-8.

Sheikhaei:2024:ESE

[1650] Mohammad Sadegh Sheikhaei, Yuan Tian, Shaowei Wang, and Bowen Xu. An empirical study on the effectiveness of large language models for SATD identification and classification. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10548-3.

Park:2024:ETS

[1651] Kang il Park, Jack Johnson, Cole S. Peterson, Nishitha Yedla, Isaac Baysinger, Jairo Aponte, and Bonita Sharif. An eye tracking study assessing source code readability rules for program comprehension. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10532-x.

Lee:2024:UEM

[1652] Carol S. Lee and Catherine M. Hicks. Understanding and effectively mitigating code review anxiety. *Empirical Software Engineering*, 29(6): ??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10550-9`.

Zhang:2024:RAS

[1653] Xuejun Zhang, Xia Hou, Xiuming Qiao, and Wenfeng Song. A review of automatic source code summarization. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10553-6`.

Khajezade:2024:EFS

[1654] Mohamad Khajezade, Fatemeh H. Fard, and Mohamed S. Shehata. Evaluating few-shot and contrastive learning methods for code clone detection. *Empirical Software Engineering*, 29(6):??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10441-z`.

Anonymous:2024:JN

[1655] Anonymous. Journal navigation. *Empirical Software Engineering*, 29(6): ??, November 2024. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic).

Sellami:2025:EMM

[1656] Khaled Sellami and Mohamed Aymen Saied. Extracting microservices from monolithic systems using deep reinforcement learning. *Empirical Software Engineering*, 30(1): ??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10547-4`.

Dorner:2025:UBI

[1657] Michael Dorner, Daniel Mendez, Krzysztof Wnuk, Ehsan Zabardast, and Jacek Czerwonka. The upper bound of information diffusion in code review. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10442-y`.

Hong:2025:TMC

[1658] Jaemin Hong and Sukyoung Ryu. Type-migrating C-to-Rust translation using a large language model. *Empirical Software Engineering*, 30(1): ??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10573-2`.

Koana:2025:CEO

[1659] Umme Ayman Koana, Quang Hy Le, Shaikur Raman, Chris Carlson, Francis Chew, and Maleknaz Nayebi. Correction to: Examining ownership models in software teams. *Empirical Software Engineering*, 30(1):

??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10566-1. See [1646].

Tan:2025:ADL

[1660] Chao Tan, Razieh Behjati, and Erik Arisholm. Application of deep learning models to generate rich, dynamic and production-like test data. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10541-w.

Li:2025:BLG

[1661] Hao Li and Cor-Paul Bezemer. Bridging the language gap: an empirical study of bindings for open source machine learning libraries across software package ecosystems. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10570-5.

Improta:2025:ERA

[1662] Cristina Improta, Pietro Liguori, Roberto Natella, Bojan Cukic, and Domenico Cotroneo. Enhancing robustness of AI offensive code generators via data augmentation. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10569-y.

Job:2025:HWD

[1663] Ricardo Job and Andre Hora. How and why developers implement OS-specific tests. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10571-4.

Zampetti:2025:DFC

[1664] Fiorella Zampetti, Cyrine Zid, Giuliano Antoniol, and Massimiliano Di Penta. The downside of functional constructs: a quantitative and qualitative analysis of their fix-inducing effects. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10568-z.

Pizard:2025:URR

[1665] Sebastián Pizard, Joaquín Lezama, Rodrigo García, Diego Vallespir, and Barbara Kitchenham. Using rapid reviews to support software engineering practice: a systematic review and a replication study. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10545-6.

Yang:2025:GPA

[1666] Shishuai Yang, Qinsheng Hou, Shuang Li, Fenghao Xu, and Wenrui Diao. From guidelines to practice: assessing Android app developer compliance

with Google's security recommendations. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10559-0`.

Khan:2025:ACS

[1667] Monoshiz Mahbub Khan and Zhe Yu. Approaching code search for Python as a translation retrieval problem with dual encoders. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10580-3`.

Shao:2025:TET

[1668] Hanying Shao, Zishuo Ding, Weiyi Shang, Jinqiu Yang, and Nikolaos Tsantalis. Towards effectively testing machine translation systems from white-box perspectives. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10549-2`.

Wu:2025:CPC

[1669] Yijian Wu, Yuan Chen, Xin Peng, Bin Hu, Xiaochen Wang, Baiqiang Fu, and Wenyun Zhao. CloneRipples: predicting change propagation between code clone instances by graph-based deep learning. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10567-0`.

Schantong:2025:TTP

[1670] Belinda Schantong, Norbert Siegmund, and Janet Siegmund. Toward a theory on programmer's block inspired by writer's block. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10542-9`.

Eberlein:2025:EDC

[1671] Jonas Eberlein, Daniel Rodriguez, and Rachel Harrison. The effect of data complexity on classifier performance. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10554-5`.

Coelho:2025:QSR

[1672] Flávia Coelho, Nikolaos Tsantalis, Tiago Massoni, and Everton L. G. Alves. A qualitative study on refactorings induced by code review. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10560-7`.

Habiba:2025:HDM

[1673] Umm e Habiba, Mohammad Kasra Habib, Justus Bogner, Jonas Fritzsch, and Stefan Wagner. How do ML practitioners perceive explainability? An

interview study of practices and challenges. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10565-2`.

Giamattei:2025:RLO

[1674] Luca Giamattei, Matteo Biagiola, Roberto Pietrantuono, Stefano Russo, and Paolo Tonella. Reinforcement learning for online testing of autonomous driving systems: a replication and extension study. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10562-5`.

Shen:2025:UVS

[1675] Yijun Shen, Xiang Gao, Hailong Sun, and Yu Guo. Understanding vulnerabilities in software supply chains. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10581-2`.

Wang:2025:IJM

[1676] Weidong Wang, Dian Li, Yujian Kang, and Yang Zhao. An intelligent Java method name recommendation framework via two-phase neural networks. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10574-1`.

Blackwell:2025:HBB

[1677] Daniel Blackwell, Ingolf Becker, and David Clark. Hyperfuzzing: black-box security hypertesting with a grey-box fuzzer. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10556-3`.

Shah:2025:TER

[1678] Mehil B. Shah, Mohammad Masudur Rahman, and Foutse Khomh. Towards enhancing the reproducibility of deep learning bugs: an empirical study. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10579-w`.

Yang:2025:PCR

[1679] Lanxin Yang, Bohan Liu, Junyu Jia, Jinwei Xu, Junming Xue, He Zhang, and Alberto Bacchelli. Prioritizing code review requests to improve review efficiency: a simulation study. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10575-0`.

Casanueva:2025:ICP

[1680] Annalí Casanueva, Davide Rossi, Stefano Zacchiroli, and Théo Zimmermann. The impact of the COVID-19 pandemic on women's contribution to public code. *Empirical Software Engineering*, 30(1):

??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10552-7.

Sorokin:2025:CSB

[1681] Lev Sorokin, Damir Safin, and Shiva Nejati. Can search-based testing with Pareto optimization effectively cover failure-revealing test inputs? *Empirical Software Engineering*, 30(1): ??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10564-3.

Martins:2025:TCR

[1682] Luana Martins, Valeria Pontillo, Heitor Costa, Filomena Ferrucci, Fabio Palomba, and Ivan Machado. Test code refactoring unveiled: where and how does it affect test code quality and effectiveness? *Empirical Software Engineering*, 30(1): ??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10577-y.

He:2025:EPT

[1683] Junda He, Bowen Xu, Zhou Yang, DongGyun Han, Chengran Yang, Jiakun Liu, Zhipeng Zhao, and David Lo. PTM4Tag+: Tag recommendation of Stack Overflow posts with pre-trained models. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10576-z.

Frattini:2025:ABD

[1684] Julian Frattini, Davide Fucci, Richard Torkar, Lloyd Montgomery, Michael Unterkalmsteiner, Jannik Fischbach, and Daniel Mendez. Applying Bayesian data analysis for causal inference about requirements quality: a controlled experiment. *Empirical Software Engineering*, 30(1): ??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10582-1.

Caddy:2025:RSI

[1685] James Caddy, Christoph Treude, Markus Wagner, and Earl T. Barr. The role of surprisal in issue trackers. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10587-w.

Wang:2025:DLB

[1686] Taiming Wang, Yuxia Zhang, Lin Jiang, Yi Tang, Guangjie Li, and Hui Liu. Deep learning based identification of inconsistent method names: How far are we? *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10592-z. See correction [1741].

Sha:2025:PBB

[1687] Zihan Sha, Chao Zhang, Hao Wang, Zeyu Gao, Bolun Zhang, Yang Lan, and Hui Shu. PromeTrans: Bootstrap

binary functionality classification with knowledge transferred from pre-trained models. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10593-y`.

Fallahzadeh:2025:CTS

[1688] Emad Fallahzadeh, Peter C. Rigby, and Bram Adams. Contrasting test selection, prioritization, and batch testing at scale. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10589-8`.

Mailach:2025:OPW

[1689] Alina Mailach, Dominik Gorgosch, Norbert Siegmund, and Janet Siegmund. "Ok pal, we have to code that now": interaction patterns of programming beginners with a conversational chatbot. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10561-6`.

Godliauskas:2025:WBS

[1690] Povilas Godliauskas and Darja Šmite. The well-being of software engineers: a systematic literature review and a theory. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10543-8`.

Tang:2025:CAR

[1691] Xunzhu Tang, Haoye Tian, Pingfan Kong, Saad Ezzini, Kui Liu, Xin Xia, Jacques Klein, and Tegawendé F. Bissyandé. Correction to: App review driven collaborative bug finding. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10586-x`. See [1615].

Zhou:2025:BEK

[1692] Xin Zhou, DongGyun Han, and David Lo. Bridging expert knowledge with deep learning techniques for just-in-time defect prediction. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10591-0`.

Yang:2025:SAS

[1693] Xueqi Yang, Mariusz Jakubowski, Li Kang, Haojie Yu, and Tim Menzies. SparseCoder: Advancing source code analysis with sparse attention and learned token pruning. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10558-1`.

Mindom:2025:HPT

[1694] Paulina Stevia Nouwou Mindom, Amin Nikanjam, and Foutse Khomh. Harnessing pre-trained generalist agents

for software engineering tasks. *Empirical Software Engineering*, 30(1): ??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10597-8`.

Yavuz:2025:WDC

[1695] Elçin Yenişen Yavuz, Dirk Riehle, and Ankita Mehrotra. Why do companies create and how do they succeed with a vendor-led open source foundation. *Empirical Software Engineering*, 30(1):??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10588-9`.

Anonymous:2025:JNa

[1696] Anonymous. Journal navigation. *Empirical Software Engineering*, 30(1): ??, January 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic).

Badampudi:2025:LSR

[1697] Deepika Badampudi, Muhammad Usman, and Xingru Chen. Large scale reuse of microservices using CI/CD and InnerSource practices — a case study. *Empirical Software Engineering*, 30(2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10595-w`.

Jayasuriya:2025:ESS

[1698] Dhanushka Jayasuriya, Samuel Ou, Saakshi Hegde, Valerio Terragni, Jens Dietrich, and Kelly Blincoe. An extended study of syntactic breaking changes in the wild. *Empirical Software Engineering*, 30(2): ??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10563-4`.

Sundelin:2025:GCC

[1699] Anders Sundelin, Javier Gonzalez-Huerta, Richard Torkar, and Krzysztof Wnuk. Governing the commons: code ownership and code-clones in large-scale software development. *Empirical Software Engineering*, 30(2): ??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10598-7`.

Hyun:2025:CFA

[1700] Sangwon Hyun, Eunkyoung Jee, and Doo-Hwan Bae. Collaboration failure analysis in cyber-physical system-of-systems using context fuzzy clustering. *Empirical Software Engineering*, 30(2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10572-3`.

Kang:2025:EAD

[1701] Sungmin Kang, Bei Chen, Shin Yoo, and Jian-Guang Lou. Explainable automated debugging via large language model-driven scientific debugging. *Empirical Software Engineering*, 30(2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https:`

//link.springer.com/article/10.1007/s10664-024-10594-x.

Abid:2025:MMA

[1702] Shamsa Abid, Xuemeng Cai, and Lingxiao Jiang. Measuring model alignment for code clone detection using causal interpretation. *Empirical Software Engineering*, 30(2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10583-0.

Tihanyi:2025:HSA

[1703] Norbert Tihanyi, Tamas Bisztray, Mohamed Amine Ferrag, Ridhi Jain, and Lucas C. Cordeiro. How secure is AI-generated code: a large-scale comparison of large language models. *Empirical Software Engineering*, 30(2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10590-1.

SaeediNikoo:2025:ESB

[1704] Mahdi Saeedi Nikoo, Sangeeth Kochanthara, Önder Babur, and Mark van den Brand. An empirical study of business process models and model clones on GitHub. *Empirical Software Engineering*, 30(2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10584-z.

Sha:2025:OEB

[1705] Zihan Sha, Yang Lan, Chao Zhang, Hao Wang, Zeyu Gao, Bolun Zhang, and Hui Shu. OpTrans: enhancing binary code similarity detection with function inlining re-optimization. *Empirical Software Engineering*, 30(2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10605-x.

Zheng:2025:TUL

[1706] Zibin Zheng, Kaiwen Ning, Qingyuan Zhong, Jiachi Chen, Wenqing Chen, Lianghong Guo, Weicheng Wang, and Yanlin Wang. Towards an understanding of large language models in software engineering tasks. *Empirical Software Engineering*, 30(2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10602-0.

Kamath:2025:LDB

[1707] Divya M. Kamath, Bram Adams, and Ahmed E. Hassan. Lightweight dynamic build batching algorithms for continuous integration. *Empirical Software Engineering*, 30(2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10555-4.

Yang:2025:CPI

[1708] Lanxin Yang, He Zhang, Jinwei Xu, Jun Lyu, Xin Zhou, Dong Shao, Shan Gao, and Alberto Bacchelli. Correction to: A preliminary investigation on using multi-task learning to predict change performance in code reviews. *Empirical Software Engineer-*

ing, 30(2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10578-x`. See [1648].

Davila:2025:FGT

[1709] Nicole Davila, Ingrid Nunes, and Igor Wiese. A fine-grained taxonomy of code review feedback in TypeScript projects. *Empirical Software Engineering*, 30(2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10604-y`.

Cassee:2025:NSA

[1710] Nathan Cassee, Neil Ernst, Nicole Novielli, and Alexander Serebrenik. Negativity in self-admitted technical debt: how sentiment influences prioritization. *Empirical Software Engineering*, 30(2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10611-z`.

Flint:2025:HDD

[1711] Samuel W. Flint, Ali M. Keshk, Robert Dyer, and Hamid Bagheri. How do developers use type inference: an exploratory study in Kotlin. *Empirical Software Engineering*, 30 (2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10585-y`.

Fan:2025:DRP

[1712] Youmei Fan, Dong Wang, Supatsara Wattanakriengkrai, Hathaichanok Damrongsiri, Christoph Treude, Hideaki Hata, and Raula Gaikovina Kula. Developer reactions to protestware in open source software: the cases of `color.js` and `es5.ext`. *Empirical Software Engineering*, 30(2): ??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10599-6`.

Ait:2025:SHF

[1713] Adem Ait, Javier Luis Cánovas Izquierdo, and Jordi Cabot. On the suitability of hugging face hub for empirical studies. *Empirical Software Engineering*, 30(2): ??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10608-8`.

Zhang:2025:ECS

[1714] Yue Zhang, Justin Murphy, and Akond Rahman. *Come for syntax, stay for speed, write secure code*: an empirical study of security weaknesses in Julia programs. *Empirical Software Engineering*, 30 (2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10606-w`.

Wen:2025:UOP

[1715] Jinfeng Wen, Zhenpeng Chen, Federica Sarro, and Shangguang Wang. Un-

veiling overlooked performance variance in serverless computing. *Empirical Software Engineering*, 30(2): ??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10615-3`.

Zhang:2025:TBC

[1716] Kechi Zhang, Jia Li, Zhuo Li, Zhi Jin, and Ge Li. Transformer-based code model with compressed hierarchy representation. *Empirical Software Engineering*, 30(2): ??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10612-6`.

Anonymous:2025:JNb

[1717] Anonymous. Journal navigation. *Empirical Software Engineering*, 30(2):??, March 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic).

Anonymous:2025:JNc

[1718] Anonymous. Journal navigation. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic).

Ebrahimi:2025:USA

[1719] Amir M. Ebrahimi, Bram Adams, and Ahmed E. Hassan. UPC sentinel: An accurate approach for detecting upgradeability proxy contracts in Ethereum. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10609-7`.

Yang:2025:CFS

[1720] Jiahui Yang, Xiangfu Zhao, and Naixiang Gou. CSAFuzzer: Fuzzing smart contracts combining with static analysis. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10623-3`.

Zhang:2025:FGE

[1721] Zhiyi Zhang, Yichun Wang, and Zhiqiu Huang. A fine-grained evaluation of mutation operators to boost mutation testing for deep learning systems. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10613-5`.

Gocmen:2025:ECR

[1722] Ismail Sergen Göçmen, Ahmed Salih Cezayir, and Eray Tüzün. Enhanced code reviews using pull request based change impact analysis. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10600-2`.

Tambon:2025:BLL

[1723] Florian Tambon, Arghavan Moradi-Dakhel, and Giuliano Antoniol. Bugs in large language models generated

code: an empirical study. *Empirical Software Engineering*, 30(3): ??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10614-4`.

Genfer:2025:UST

[1724] Patric Genfer, Souhaila Serbout, and Cesare Pautasso. Understanding security tactics in microservice APIs using annotated software architecture decomposition models — a controlled experiment. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10601-1`.

Seth:2025:CEE

[1725] Aishwarya Seth, Saikath Bhattacharya, and Laurie Williams. Comparing effectiveness and efficiency of Interactive Application Security Testing (IAST) and Runtime Application Self-Protection (RASP) tools in a large Java-based system. *Empirical Software Engineering*, 30(3): ??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10621-5`.

Dong:2025:BSC

[1726] Zeming Dong, Qiang Hu, and Jianjun Zhao. Boosting source code learning with text-oriented data augmentation: an empirical study. *Empirical Software Engineering*, 30(3): ??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10624-2`.

Pandey:2025:DPR

[1727] Sushant Kumar Pandey, Sivajeet Chand, and Darko Durisic. Design pattern recognition: a study of large language models. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10625-1`.

Ahmed:2025:HMF

[1728] Sharif Ahmed and Nasir U. Eisty. Hold on! Is my feedback useful? Evaluating the usefulness of code review comments. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10617-1`.

Paiva:2025:AAD

[1729] Camila A. Paiva, Raquel Maximino, and Vanessa Braganholo. Analyzing the adoption of database management systems throughout the history of open source projects. *Empirical Software Engineering*, 30(3): ??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10627-z`.

Hassani:2025:ESL

[1730] Shabnam Hassani, Mehrdad Sabetzadeh, and Daniel Amyot. An empirical study on LLM-based classi-

fication of requirements-related provisions in food-safety regulations. *Empirical Software Engineering*, 30 (3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10619-z`.

Nassif:2025:EID

[1731] Mathieu Nassif and Martin P. Robillard. Evaluating interactive documentation for programmers. *Empirical Software Engineering*, 30(3): ??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10618-0`.

Verdet:2025:AAS

[1732] Alexandre Verdet, Mohammad Hamdaqa, and Foutse Khomh. Assessing the adoption of security policies by developers in terraform across different cloud providers. *Empirical Software Engineering*, 30(3): ??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10610-0`.

Perez-Rosero:2025:WSW

[1733] Salomé Perez-Rosero, Robert Dyer, and Witawas Srisa-an. WIA-SZZ: Work item aware SZZ. *Empirical Software Engineering*, 30(3): ??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10616-2`.

Wang:2025:FLS

[1734] Rongcun Wang, Xingyu Ji, and Shujuan Jiang. Fixer-level supervised contrastive learning for bug assignment. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10634-0`.

Fawzy:2025:EDM

[1735] Ahmed Fawzy, Amjed Tahir, and Peng Liang. Exploring data management challenges and solutions in agile software development: a literature review and practitioner survey. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10630-4`.

Ajibode:2025:TSV

[1736] Adekunle Ajibode, Abdul Ali Bangash, and Ahmed E. Hassan. Towards semantic versioning of open pre-trained language model releases on hugging face. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10631-3`.

Tkalich:2025:UFC

[1737] Anastasiia Tkalich, Eriks Klotins, and Astri Barbala. User feedback in continuous software engineering: revealing the state-of-practice. *Empirical Software Engineering*, 30

(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-024-10557-2`.

Linaaker:2025:PSO

[1738] Johan Linåker, Björn Lundell, and Gregorio Robles. Public sector open source software projects — how is development organized? *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10626-0`.

Eisty:2025:TRS

[1739] Nasir U. Eisty, Upulee Kanewala, and Jeffrey C. Carver. Testing research software: an in-depth survey of practices, methods, and tools. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10620-6`.

Devathasan:2025:ESD

[1740] Kezia Devathasan, Nowshin Nawar Arony, and Daniela Damian. Empathy, self-determination and motivation: moderating diversity for enhanced performance in software development teams. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10632-2`.

Wang:2025:CDL

[1741] Taiming Wang, Yuxia Zhang, and Hui Liu. Correction to: Deep learning based identification of inconsistent method names: how far are we? *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10640-2`. See [1686].

Rosa:2025:WHD

[1742] Giovanni Rosa, Simone Scalabrino, and Rocco Oliveto. Why and how developers maintain smart contracts. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10639-9`.

Ouedraogo:2025:EAT

[1743] Wendkûuni C. Ouédraogo, Laura Plein, and Tegawendé F. Bissyandé. Enriching automatic test case generation by extracting relevant test inputs from bug reports. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL `https://link.springer.com/article/10.1007/s10664-025-10635-z`.

Zhang:2025:DSC

[1744] Yang Zhang, Chunhui Zhang, and Grant Meredith. DeepCSS: severity classification for code smell based on deep learning. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN

ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-025-10637-x.

Li:2025:SSC

[1745] Jia Li, Zheng Fang, and Ge Li. SCodeSearcher: soft contrastive learning for code search. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10603-z.

Tang:2025:CDG

[1746] Yixuan Tang, Junwei Zeng, and Zhiqiu Huang. CTDip: a diversity-guided test program synthesis approach for boosting compiler bug detection. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-025-10642-0.

Mohayeji:2025:SDC

[1747] Hamid Mohayeji, Andrei Agaronian, and Alexander Serebrenik. Securing dependencies: a comprehensive study of Dependabot's impact on vulnerability mitigation. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-025-10638-w.

Wei:2025:HFA

[1748] Lili Wei, Heqing Huang, and Kevin Li. How far are app secrets from being stolen? A case study on Android. *Empirical Software Engineering*, 30(3):??, May 2025. CODEN ESENFW. ISSN 1382-3256 (print), 1573-7616 (electronic). URL https://link.springer.com/article/10.1007/s10664-024-10607-9.