

Rui Abreu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8968836/publications.pdf>

Version: 2024-02-01

120
papers

4,209
citations

687335

13
h-index

315719

38
g-index

133
all docs

133
docs citations

133
times ranked

1317
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Syrius: Synthesis of Rules for Intrusion Detectors. IEEE Transactions on Reliability, 2022, 71, 370-381. | 4.6 | 5 |
| 2 | Maestro: a platform for benchmarking automatic program repair tools on software vulnerabilities. , 2022, , . | | 3 |
| 3 | On the Energy Footprint of Mobile Testing Frameworks. IEEE Transactions on Software Engineering, 2021, 47, 2260-2271. | 5.6 | 14 |
| 4 | A Theoretical and Empirical Analysis of Program Spectra Diagnosability. IEEE Transactions on Software Engineering, 2021, 47, 412-431. | 5.6 | 4 |
| 5 | Supervised Learning for Test Suit Selection in Continuous Integration. , 2021, , . | | 3 |
| 6 | Spectrum-based feature localization. , 2021, , . | | 4 |
| 7 | Fixing vulnerabilities potentially hinders maintainability. Empirical Software Engineering, 2021, 26, 1. | 3.9 | 0 |
| 8 | Patterns and Energy Consumption: Design, Implementation, Studies, and Stories. , 2021, , 89-121. | | 2 |
| 9 | A Comparative Study of Automatic Program Repair Techniques for Security Vulnerabilities. , 2021, , . | | 7 |
| 10 | On the Runtime and Energy Performance of WebAssembly: Is WebAssembly superior to JavaScript yet?. , 2021, , . | | 7 |
| 11 | On Understanding Contextual Changes of Failures. , 2021, , . | | 1 |
| 12 | Multiple fault localization of software programs: A systematic literature review. Information and Software Technology, 2020, 124, 106312. | 4.4 | 48 |
| 13 | Empirical review of automated analysis tools on 47,587 Ethereum smart contracts. , 2020, , . | | 147 |
| 14 | Visual sketching. , 2020, , . | | 4 |
| 15 | Empirical Study of Restarted and Flaky Builds on Travis CI. , 2020, , . | | 14 |
| 16 | SmartBugs. , 2020, , . | | 51 |
| 17 | Diagnosing Software Faults Using Multiverse Analysis. , 2020, , . | | 9 |
| 18 | An Empirical Study on the Use of Defect Prediction for Test Case Prioritization. , 2019, , . | | 27 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Empirical review of Java program repair tools: a large-scale experiment on 2,141 bugs and 23,551 repair attempts. , 2019, , . | | 82 |
| 20 | MOTSD: a multi-objective test selection tool using test suite diagnosability. , 2019, , . | | 9 |
| 21 | EMaaS: Energy Measurements as a Service for Mobile Applications. , 2019, , . | | 5 |
| 22 | Catalog of energy patterns for mobile applications. Empirical Software Engineering, 2019, 24, 2209-2235. | 3.9 | 63 |
| 23 | To the attention of mobile software developers: guess what, test your app!. Empirical Software Engineering, 2019, 24, 2438-2468. | 3.9 | 23 |
| 24 | An Analysis of 35+ Million Jobs of Travis CI. , 2019, , . | | 11 |
| 25 | Pangolin: An SFL-Based Toolset for Feature Localization. , 2019, , . | | 7 |
| 26 | Do Energy-Oriented Changes Hinder Maintainability?. , 2019, , . | | 15 |
| 27 | Demystifying the Combination of Dynamic Slicing and Spectrum-based Fault Localization. , 2019, , . | | 10 |
| 28 | Model-Based Software Debugging. , 2019, , 365-387. | | 0 |
| 29 | GreenSoftwareLab: Towards an Engineering Discipline for Green Software. Impact, 2018, 2018, 9-11. | 0.1 | 1 |
| 30 | Lightweight source code monitoring with Triggr. , 2018, , . | | 1 |
| 31 | A qualitative reasoning approach to spectrum-based fault localization. , 2018, , . | | 3 |
| 32 | Measuring the energy footprint of mobile testing frameworks. , 2018, , . | | 5 |
| 33 | Leveraging Qualitative Reasoning to Improve SFL. , 2018, , . | | 10 |
| 34 | Empirical Evaluation of Similarity Coefficients for Multiagent Fault Localization. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 767-782. | 9.3 | 2 |
| 35 | Risks and Security of Internet and Systems. Lecture Notes in Computer Science, 2017, , . | 1.3 | 1 |
| 36 | Prevalence of Single-Fault Fixes and Its Impact on Fault Localization. , 2017, , . | | 23 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Evaluating and Improving Fault Localization. , 2017, , . | | 259 |
| 38 | A Test-Suite Diagnosability Metric for Spectrum-Based Fault Localization Approaches. , 2017, , . | | 50 |
| 39 | Leafactor: Improving Energy Efficiency of Android Apps via Automatic Refactoring. , 2017, , . | | 24 |
| 40 | Performance-Based Guidelines for Energy Efficient Mobile Applications. , 2017, , . | | 54 |
| 41 | Revisiting the Practical Use of Automated Software Fault Localization Techniques. , 2017, , . | | 13 |
| 42 | A Database of Existing Vulnerabilities to Enable Controlled Testing Studies. International Journal of Secure Software Engineering, 2017, 8, 1-23. | 0.4 | 3 |
| 43 | The ANTAREX approach to autotuning and adaptivity for energy efficient HPC systems. , 2016, , . | | 22 |
| 44 | Framing program comprehension as fault localization. Journal of Software: Evolution and Process, 2016, 28, 840-862. | 1.6 | 7 |
| 45 | A Survey on Software Fault Localization. IEEE Transactions on Software Engineering, 2016, 42, 707-740. | 5.6 | 636 |
| 46 | Time, Frequency & Complexity Analysis for Recognizing Panic States from Physiologic Time-Series. , 2016, , . | | 9 |
| 47 | NARROWING THE GAP BETWEEN MUSEUMS, CLASSROOMS AND TECHNOLOGY: THE U.OPENLAB INITIATIVE PROTOTYPE. , 2016, , . | | 0 |
| 48 | Learning Diagnosis Models Using Variable-Fidelity Component Model Libraries â...âSupported by SFI grant 12/RC/2289.. IFAC-PapersOnLine, 2015, 48, 428-433. | 0.9 | 0 |
| 49 | A wearable and mobile intervention delivery system for individuals with panic disorder. , 2015, , . | | 16 |
| 50 | Towards a mobile and wearable system for predicting panic attacks. , 2015, , . | | 36 |
| 51 | CodeAware: Sensor-Based Fine-Grained Monitoring and Management of Software Artifacts. , 2015, , . | | 4 |
| 52 | Using constraints to diagnose faulty spreadsheets. Software Quality Journal, 2015, 23, 297-322. | 2.2 | 27 |
| 53 | On the empirical evaluation of similarity coefficients for spreadsheets fault localization. Automated Software Engineering, 2015, 22, 47-74. | 2.9 | 29 |
| 54 | Testing Software and Systems. Lecture Notes in Computer Science, 2015, , . | 1.3 | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Testing for Distinguishing Repair Candidates in Spreadsheets – the Mussco Approach. Lecture Notes in Computer Science, 2015, , 124-140. | 1.3 | 3 |
| 56 | Continuous Test Generation on Guava. Lecture Notes in Computer Science, 2015, , 228-234. | 1.3 | 1 |
| 57 | Continuous test generation. , 2014, , . | | 41 |
| 58 | A diagnosis-based approach to software comprehension. , 2014, , . | | 18 |
| 59 | Foreword of the 5th Portuguese Software Engineering Doctoral Symposium (SEDES'2014). , 2014, , . | | 0 |
| 60 | Automatic systems diagnosis without behavioral models. , 2014, , . | | 1 |
| 61 | FaultySheet Detective: When Smells Meet Fault Localization. , 2014, , . | | 12 |
| 62 | Diagnosing unobserved components in self-adaptive systems. , 2014, , . | | 14 |
| 63 | A dynamic code coverage approach to maximize fault localization efficiency. Journal of Systems and Software, 2014, 90, 18-28. | 4.5 | 26 |
| 64 | Smelling Faults in Spreadsheets. , 2014, , . | | 30 |
| 65 | Progress in Artificial Intelligence. Lecture Notes in Computer Science, 2013, , . | 1.3 | 6 |
| 66 | Fundamental Approaches to Software Engineering. Lecture Notes in Computer Science, 2013, , . | 1.3 | 3 |
| 67 | Multicore Software Engineering, Performance, and Tools. Lecture Notes in Computer Science, 2013, , . | 1.3 | 1 |
| 68 | Diagnosing architectural run-time failures. , 2013, , . | | 8 |
| 69 | Encoding Test Requirements as Constraints for Test Suite Minimization. , 2013, , . | | 5 |
| 70 | Cues for scent intensification in debugging. , 2013, , . | | 3 |
| 71 | Using HTML5 visualizations in software fault localization. , 2013, , . | | 42 |
| 72 | Leveraging a Constraint Solver for Minimizing Test Suites. , 2013, , . | | 7 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Threats to the validity and value of empirical assessments of the accuracy of coverage-based fault locators. , 2013, , . | | 101 |
| 74 | MZoltar: automatic debugging of Android applications. , 2013, , . | | 12 |
| 75 | Entropy-based test generation for improved fault localization. , 2013, , . | | 46 |
| 76 | Interoperability in Ambient Assisted Living using OpenEHR. , 2013, , . | | 2 |
| 77 | Prioritizing Tests for Fault Localization. , 2013, , 247-257. | | 2 |
| 78 | On the Empirical Evaluation of Fault Localization Techniques for Spreadsheets. Lecture Notes in Computer Science, 2013, , 68-82. | 1.3 | 36 |
| 79 | MHS2: A Map-Reduce Heuristic-Driven Minimal Hitting Set Search Algorithm. Lecture Notes in Computer Science, 2013, , 25-36. | 1.3 | 7 |
| 80 | A Distributed Approach to Diagnosis Candidate Generation. Lecture Notes in Computer Science, 2013, , 175-186. | 1.3 | 4 |
| 81 | Testing Software and Systems. Lecture Notes in Computer Science, 2013, , . | 1.3 | 0 |
| 82 | Spectrum-Based Fault Localization for Diagnosing Concurrency Faults. Lecture Notes in Computer Science, 2013, , 239-254. | 1.3 | 11 |
| 83 | GZoltar: an eclipse plug-in for testing and debugging. , 2012, , . | | 124 |
| 84 | AI for the win. Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM, 2012, 37, 1-8. | 0.7 | 8 |
| 85 | Debugging Spreadsheets: A CSP-based Approach. , 2012, , . | | 8 |
| 86 | A Topology-Based Model for Estimating the Diagnostic Efficiency of Statistics-Based Approaches. , 2012, , . | | 4 |
| 87 | Self-Healing on the Cloud: State-of-the-Art and Future Challenges. , 2012, , . | | 1 |
| 88 | Computational Collective Intelligence. Technologies and Applications. Lecture Notes in Computer Science, 2012, , . | 1.3 | 2 |
| 89 | Integrating Interactive Visualizations of Automatic Debugging Techniques on an Integrated Development Environment. International Journal of Creative Interfaces and Computer Graphics, 2012, 3, 42-59. | 0.1 | 2 |
| 90 | OCE: An Online Colaborative Editor. Lecture Notes in Computer Science, 2012, , 89-98. | 1.3 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Lightweight Automatic Error Detection by Monitoring Collar Variables. Lecture Notes in Computer Science, 2012, , 215-230. | 1.3 | 2 |
| 92 | Prioritizing tests for fault localization through ambiguity group reduction. , 2011, , . | | 40 |
| 93 | Probabilistic Error Propagation Modeling in Logic Circuits. , 2011, , . | | 5 |
| 94 | Prioritizing tests for software fault diagnosis. Software - Practice and Experience, 2011, 41, 1105-1129. | 3.6 | 17 |
| 95 | Simultaneous debugging of software faults. Journal of Systems and Software, 2011, 84, 573-586. | 4.5 | 35 |
| 96 | An OpenGL-based eclipse plug-in for visual debugging. , 2011, , . | | 3 |
| 97 | An empirical study on the usage of testability information to fault localization in software. , 2011, , . | | 6 |
| 98 | Architecture-Based Run-Time Fault Diagnosis. Lecture Notes in Computer Science, 2011, , 261-277. | 1.3 | 9 |
| 99 | A Diagnostic Reasoning Approach to Defect Prediction. Lecture Notes in Computer Science, 2011, , 416-425. | 1.3 | 2 |
| 100 | Diagnosing multiple intermittent failures using maximum likelihood estimation. Artificial Intelligence, 2010, 174, 1481-1497. | 5.8 | 27 |
| 101 | Increasing System Availability with Local Recovery Based on Fault Localization. , 2010, , . | | 2 |
| 102 | PETTool: A pattern-based GUI testing tool. , 2010, , . | | 13 |
| 103 | Exploiting count spectra for Bayesian fault localization. , 2010, , . | | 10 |
| 104 | The GZoltar Project: A Graphical Debugger Interface. Lecture Notes in Computer Science, 2010, , 215-218. | 1.3 | 13 |
| 105 | Testing “ Practice and Research Techniques. Lecture Notes in Computer Science, 2010, , . | 1.3 | 1 |
| 106 | Using Fault Screeners for Software Error Detection. Communications in Computer and Information Science, 2010, , 60-74. | 0.5 | 3 |
| 107 | Refining spectrum-based fault localization rankings. , 2009, , . | | 26 |
| 108 | Zoltar. , 2009, , . | | 28 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | A practical evaluation of spectrum-based fault localization. Journal of Systems and Software, 2009, 82, 1780-1792. | 4.5 | 367 |
| 110 | Spectrum-Based Multiple Fault Localization. , 2009, , . | | 239 |
| 111 | Localizing Software Faults Simultaneously. , 2009, , . | | 12 |
| 112 | Zoltar: A Toolset for Automatic Fault Localization. , 2009, , . | | 59 |
| 113 | Automated Fault Diagnosis in Embedded Systems. , 2008, , . | | 14 |
| 114 | Automatic software fault localization using generic program invariants. , 2008, , . | | 29 |
| 115 | An observation-based model for fault localization. , 2008, , . | | 26 |
| 116 | Diagnosis of Embedded Software Using Program Spectra. , 2007, , . | | 28 |
| 117 | On the Accuracy of Spectrum-based Fault Localization. , 2007, , . | | 408 |
| 118 | On the Accuracy of Spectrum-based Fault Localization. , 2007, , . | | 28 |
| 119 | An Evaluation of Similarity Coefficients for Software Fault Localization. , 2006, , . | | 331 |
| 120 | Improving Energy Efficiency Through Automatic Refactoring. Journal of Software Engineering Research and Development, 0, 7, 2. | 1.0 | 5 |