

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

128
papers

1,986
citations

25
h-index

37
g-index

158
ext. papers

2,402
ext. citations

2.9
avg, IF

4.96
L-index

#	Paper	IF	Citations
128	Adaptive Random Test Case Prioritization 2009 ,		123
127	Taming coincidental correctness: Coverage refinement with context patterns to improve fault localization 2009 ,		73
126	A Tale of Clouds: Paradigm Comparisons and Some Thoughts on Research Issues 2008 ,		70
125	A Metamorphic Testing Approach for Online Testing of Service-Oriented Software Applications. <i>International Journal of Web Services Research</i> , 2007 , 4, 61-81	0.8	68
124	Capturing propagation of infected program states 2009 ,		58
123	Detecting atomic-set serializability violations in multithreaded programs through active randomized testing 2010 ,		53
122	Data flow testing of service-oriented workflow applications 2008 ,		53
121	Partial constraint checking for context consistency in pervasive computing. <i>ACM Transactions on Software Engineering and Methodology</i> , 2010 , 19, 1-61	3.3	48
120	Testing context-aware middleware-centric programs 2006 ,		47
119	Test case prioritization for regression testing of service-oriented business applications 2009 ,		43
118	INTEGRATION TESTING OF CONTEXT-SENSITIVE MIDDLEWARE-BASED APPLICATIONS: A METAMORPHIC APPROACH. <i>International Journal of Software Engineering and Knowledge Engineering</i> , 2006 , 16, 677-703	1	42
117	How well does test case prioritization integrate with statistical fault localization?. <i>Information and Software Technology</i> , 2012 , 54, 739-758	3.4	37
116	An Adaptive Service Selection Approach to Service Composition 2008 ,		37
115	Incremental consistency checking for pervasive context 2006 ,		37
114	ConLock: a constraint-based approach to dynamic checking on deadlocks in multithreaded programs 2014 ,		35
113	Input-based adaptive randomized test case prioritization: A local beam search approach. <i>Journal of Systems and Software</i> , 2015 , 105, 91-106	3.3	33
112	MagicFuzzer: Scalable deadlock detection for large-scale applications 2012 ,		32

111	Prioritizing Test Cases for Regression Testing of Location-Based Services: Metrics, Techniques, and Case Study. <i>IEEE Transactions on Services Computing</i> , 2014 , 7, 54-67	4.8	31
110	Cross-validation based K nearest neighbor imputation for software quality datasets: An empirical study. <i>Journal of Systems and Software</i> , 2017 , 132, 226-252	3.3	30
109	Fault localization through evaluation sequences. <i>Journal of Systems and Software</i> , 2010 , 83, 174-187	3.3	30
108	Magiclock: Scalable Detection of Potential Deadlocks in Large-Scale Multithreaded Programs. <i>IEEE Transactions on Software Engineering</i> , 2014 , 40, 266-281	3.5	29
107	Inter-context control-flow and data-flow test adequacy criteria for nesC applications 2008 ,		28
106	Testing context-sensitive middleware-based software applications		28
105	Modeling and testing of cloud applications 2009 ,		26
104	XML-manipulating test case prioritization for XML-manipulating services. <i>Journal of Systems and Software</i> , 2011 , 84, 603-619	3.3	25
103	Atomicity Analysis of Service Composition across Organizations. <i>IEEE Transactions on Software Engineering</i> , 2009 , 35, 2-28	3.5	25
102	Data flow testing of service choreography 2009 ,		24
101	Testing pervasive software in the presence of context inconsistency resolution services 2008 ,		24
100	Non-parametric statistical fault localization. <i>Journal of Systems and Software</i> , 2011 , 84, 885-905	3.3	23
99	Heuristics-Based Strategies for Resolving Context Inconsistencies in Pervasive Computing Applications 2008 ,		23
98	Fault-based testing of database application programs with conceptual data model		23
97	CARISMA: a context-sensitive approach to race-condition sample-instance selection for multithreaded applications 2012 ,		21
96	Towards a metamorphic testing methodology for service-oriented software applications		19
95	An empirical comparison between direct and indirect test result checking approaches 2006 ,		19
94	Experimental Study to Compare the Use of Metamorphic Testing and Assertion Checking. <i>Ruan Jian Xue Bao/Journal of Software</i> , 2009 , 20, 2637-2654		19

93	A theoretical analysis on cloning the failed test cases to improve spectrum-based fault localization. <i>Journal of Systems and Software</i> , 2017 , 129, 35-57	3.3	18
92	Publishing and composition of atomicity-equivalent services for B2B collaboration 2006 ,		18
91	Accuracy Graphs of Spectrum-Based Fault Localization Formulas. <i>IEEE Transactions on Reliability</i> , 2017 , 66, 403-424	4.6	17
90	A general noise-reduction framework for fault localization of Java programs. <i>Information and Software Technology</i> , 2013 , 55, 880-896	3.4	17
89	Lock Trace Reduction for Multithreaded Programs. <i>IEEE Transactions on Parallel and Distributed Systems</i> , 2013 , 24, 2407-2417	3.7	17
88	Is non-parametric hypothesis testing model robust for statistical fault localization?. <i>Information and Software Technology</i> , 2009 , 51, 1573-1585	3.4	17
87	A metamorphic approach to integration testing of context-sensitive middleware-based applications		16
86	Fault Localization Based Only on Failed Runs. <i>Computer</i> , 2012 , 45, 64-71	1.6	15
85	A Subsumption Hierarchy of Test Case Prioritization for Composite Services. <i>IEEE Transactions on Services Computing</i> , 2015 , 8, 658-673	4.8	15
84	. <i>IEEE Transactions on Services Computing</i> , 2015 , 8, 740-754	4.8	15
83	Taking Advantage of Service Selection: A Study on the Testing of Location-Based Web Services Through Test Case Prioritization 2010 ,		15
82	Improving the Effectiveness of Testing Pervasive Software via Context Diversity. <i>ACM Transactions on Autonomous and Adaptive Systems</i> , 2014 , 9, 1-28	1.2	14
81	Enhancing adaptive random testing for programs with high dimensional input domains or failure-unrelated parameters. <i>Software Quality Journal</i> , 2008 , 16, 303-327	1.2	14
80	Enhancing adaptive random testing in high dimensional input domains 2007 ,		14
79	On the adoption of MC/DC and control-flow adequacy for a tight integration of program testing and statistical fault localization. <i>Information and Software Technology</i> , 2013 , 55, 897-917	3.4	13
78	LOFT: Redundant Synchronization Event Removal for Data Race Detection 2011 ,		13
77	Do Maintainers Utilize Deployed Design Patterns Effectively?. <i>Proceedings - International Conference on Software Engineering</i> , 2007 ,		13
76	Tag-Based Techniques for Black-Box Test Case Prioritization for Service Testing 2009 ,		12

75	Apricot: A Weight-Adaptation Approach to Fixing Deep Learning Models 2019 ,			12
74	Weaving Context Sensitivity into Test Suite Construction 2009 ,			11
73	Detection and resolution of atomicity violation in service composition 2007 ,			11
72	Testing object-oriented industrial software without precise oracles or results. <i>Communications of the ACM</i> , 2007 , 50, 78-85	2.5		11
71	On Practical Adequate Test Suites for Integrated Test Case Prioritization and Fault Localization 2011 ,			10
70	PAT: A pattern classification approach to automatic reference oracles for the testing of mesh simplification programs. <i>Journal of Systems and Software</i> , 2009 , 82, 422-434	3.3		10
69	Finding failures from passed test cases: improving the pattern classification approach to the testing of mesh simplification programs. <i>Software Testing Verification and Reliability</i> , 2009 , 20, 89-120	0.9		10
68	Work experience versus refactoring to design patterns 2006 ,			10
67	Automatic goal-oriented classification of failure behaviors for testing XML-based multimedia software applications: An experimental case study. <i>Journal of Systems and Software</i> , 2006 , 79, 602-612	3.3		10
66	ASN: A Dynamic Barrier-Based Approach to Confirmation of Deadlocks from Warnings for Large-Scale Multithreaded Programs. <i>IEEE Transactions on Parallel and Distributed Systems</i> , 2015 , 26, 13-23	3.7		9
65	On the Integration of Test Adequacy, Test Case Prioritization, and Statistical Fault Localization 2010 ,			9
64	More Tales of Clouds: Software Engineering Research Issues from the Cloud Application Perspective 2009 ,			9
63	On impact-oriented automatic resolution of pervasive context inconsistency 2007 ,			9
62	Towards the Testing of Power-Aware Software Applications for Wireless Sensor Networks. <i>Lecture Notes in Computer Science</i> , 2007 , 84-99	0.9		9
61	EClass: An execution classification approach to improving the energy-efficiency of software via machine learning. <i>Journal of Systems and Software</i> , 2012 , 85, 960-973	3.3		8
60	An Empirical Analysis of Three-Stage Data-Preprocessing for Analogy-Based Software Effort Estimation on the ISBSG Data 2017 ,			8
59	Assuring the model evolution of protocol software specifications by regression testing process improvement. <i>Software - Practice and Experience</i> , 2011 , 41, n/a-n/a	2.5		8
58	Extending the Theoretical Fault Localization Effectiveness Hierarchy with Empirical Results at Different Code Abstraction Levels 2014 ,			7

57	JSCloud: Toward Remote Execution of JavaScript Code on Handheld Devices 2012 ,		7
56	Bypassing Code Coverage Approximation Limitations via Effective Input-Based Randomized Test Case Prioritization 2013 ,		7
55	A Dynamic Fault Localization Technique with Noise Reduction for Java Programs 2011 ,		7
54	Debugging through Evaluation Sequences: A Controlled Experimental Study 2008 ,		7
53	MT 2016 ,		7
52	A Gamification Technique for Motivating Students to Learn Code Readability in Software Engineering 2018 ,		7
51	Test Pair Selection for Test Case Prioritization in Regression Testing for WS-BPEL Programs. <i>International Journal of Web Services Research</i> , 2013 , 10, 73-102	0.8	6
50	To What Extent is Stress Testing of Android TV Applications Automated in Industrial Environments?. <i>IEEE Transactions on Reliability</i> , 2016 , 65, 1223-1239	4.6	5
49	Which compiler optimization options should I use for detecting data races in multithreaded programs? 2013 ,		5
48	Prioritizing Structurally Complex Test Pairs for Validating WS-BPEL Evolutions 2013 ,		5
47	FLOMA: Statistical fault localization for mobile embedded system 2011 ,		5
46	Where to adapt dynamic service compositions 2009 ,		5
45	Reference Models and Automatic Oracles for the Testing of Mesh Simplification Software for Graphics Rendering 2006 ,		5
44	Local analysis of atomicity sphere for B2B collaboration 2006 ,		5
43	HistLock+: Precise Memory Access Maintenance Without Lockset Comparison for Complete Hybrid Data Race Detection. <i>IEEE Transactions on Reliability</i> , 2018 , 67, 786-801	4.6	5
42	Human and program factors affecting the maintenance of programs with deployed design patterns. <i>Information and Software Technology</i> , 2012 , 54, 99-118	3.4	4
41	Oracles Are Hardly Attain'd, and Hardly Understood: Confessions of Software Testing Researchers 2013 ,		4
40	Architecting Dynamic Data Race Detection as a Cloud-Based Service 2015 ,		4

39	Preemptive Regression Test Scheduling Strategies: A New Testing Approach to Thriving on the Volatile Service Environments 2012 ,		4
38	A web search-centric approach to recommender systems with URLs as minimal user contexts. <i>Journal of Systems and Software</i> , 2011 , 84, 930-941	3-3	4
37	An Empirical Study of the Use of Frankl-Weyuker Data Flow Testing Criteria to Test BPEL Web Services 2009 ,		4
36	Process Evolution with Atomicity Consistency 2007 ,		4
35	ASP: Abstraction Subspace Partitioning for Detection of Atomicity Violations with an Empirical Study. <i>IEEE Transactions on Parallel and Distributed Systems</i> , 2016 , 27, 724-734	3-7	3
34	PORA: Proportion-Oriented Randomized Algorithm for Test Case Prioritization 2015 ,		3
33	. <i>IEEE Transactions on Reliability</i> , 2020 , 69, 1021-1049	4.6	3
32	A Systematic Study on Factors Impacting GUI Traversal-Based Test Case Generation Techniques for Android Applications. <i>IEEE Transactions on Reliability</i> , 2019 , 68, 913-926	4.6	3
31	Taming Deadlocks in Multithreaded Programs 2013 ,		3
30	A Study on the Efficiency Aspect of Data Race Detection: A Compiler Optimization Level Perspective 2013 ,		3
29	Leveraging Performance and Power Savings for Embedded Systems Using Multiple Target Deadlines 2010 ,		3
28	Bridging the Gap Between the Theory and Practice of Software Test Automation 2010 ,		3
27	Resource prioritization of code optimization techniques for program synthesis of wireless sensor network applications. <i>Journal of Systems and Software</i> , 2009 , 82, 1376-1387	3-3	3
26	Toward effective deployment of design patterns for software extension 2006 ,		3
25	Piping Classification to Metamorphic Testing: An Empirical Study towards Better Effectiveness for the Identification of Failures in Mesh Simplification Programs. <i>Proceedings - IEEE Computer Societys International Computer Software and Applications Conference</i> , 2007 ,		3
24	Hierarchical Program Paths. <i>ACM Transactions on Software Engineering and Methodology</i> , 2016 , 25, 1-44	3-3	3
23	Fuse: An Architecture for Smart Contract Fuzz Testing Service 2018 ,		3
22	Sifter: A Service Isolation Strategy for Internet Applications. <i>IEEE Transactions on Services Computing</i> , 2018 , 1-1	4.8	3

21	AggrePlay: efficient record and replay of multi-threaded programs 2019 ,		2
20	Testing and Debugging in Continuous Integration with Budget Quotas on Test Executions 2016 ,		2
19	HistLock: Efficient and Sound Hybrid Detection of Hidden Predictive Data Races with Functional Contexts 2016 ,		2
18	SDA-CLOUD: A Multi-VM Architecture for Adaptive Dynamic Data Race Detection. <i>IEEE Transactions on Services Computing</i> , 2017 , 10, 80-93	4.8	2
17	Which Factor Impacts GUI Traversal-Based Test Case Generation Technique Most? A Controlled Experiment on Android Applications 2017 ,		2
16	SimplyDroid: Efficient event sequence simplification for android application 2017 ,		2
15	An empirical evaluation of several test-a-few strategies for testing particular conditions. <i>Software - Practice and Experience</i> , 2012 , 42, 967-994	2.5	2
14	Point-of-Interest Aware Test Case Prioritization: Methods and Experiments 2010 ,		2
13	Precise Propagation of Fault-Failure Correlations in Program Flow Graphs 2011 ,		2
12	Fault Localization with Non-parametric Program Behavior Model 2008 ,		2
11	DFL: Dual-Service Fault Localization 2016 ,		2
10	Facilitating Monkey Test by Detecting Operable Regions in Rendered GUI of Mobile Game Apps 2016 ,		2
9	In quest of the science in statistical fault localization. <i>Software - Practice and Experience</i> , 2013 , 43, 971-987	5	1
8	Connecting the Average and the Non-Average. <i>International Journal of Web Services Research</i> , 2015 , 12, 1-24	0.8	1
7	ASR: Abstraction Subspace Reduction for Exposing Atomicity Violation Bugs in Multithreaded Programs 2015 ,		1
6	Goal-Directed Context Validation for Adaptive Ubiquitous Systems 2007 ,		1
5	ReTestDroid: Towards Safer Regression Test Selection for Android Application 2018 ,		1
4	. <i>IEEE Transactions on Multimedia</i> , 2021 , 1-1	6.6	0

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| 3 | Guest editors Introduction to the special section on exploring the boundaries of software test automation. <i>Software Quality Journal</i> , 2011 , 19, 689-690 | 1.2 |
| 2 | Execution Repair for Spark Programs by Active Maintenance of Partition Dependency. <i>IEEE Access</i> , 2021 , 9, 101555-101573 | 3.5 |
| 1 | DeepEutaxy: Diversity in Weight Search Direction for Fixing Deep Learning Model Training Through Batch Prioritization. <i>IEEE Transactions on Reliability</i> , 2021 , 70, 1040-1052 | 4.6 |