Gordon Fraser

List of Publications by Year
in descending order

| 64 papers | 3,898 citations | 516710 16 h-index | 526287 27 g-index |

| 65 all docs | 65 docs citations | 65 times ranked | 1310 citing authors |

#	Article	IF	Citations
1	Pynguin: Automated Unit Test Generation for Python. , 2022, , .		0
2	Encoding the certainty of boolean variables to improve the guidance for search-based test generation. , 2021, , .		2
3	Graph-based seed object synthesis for search-based unit testing. , 2021, , .		11
4	Revisiting Test Smells in Automatically Generated Tests: Limitations, Pitfalls, and Opportunities. , 2020, , .		18
5	EvoSuite at the SBST 2020 Tool Competition. , 2020, , .		11
6	Recovering fitness gradients for interprocedural Boolean flags in search-based testing. , 2020, , .		14
7	Search-Based Testing for Scratch Programs. Lecture Notes in Computer Science, 2020, , 58-72.	1.3	2
8	Parallel Many-Objective Search for Unit Tests. , 2019, , .		2
9	Random or evolutionary search for object‐oriented test suite generation?. Software Testing Verification and Reliability, 2018, 28, e1660.	2.0	18
10	E <scp>vo</scp> s <scp>uite</scp> at the SBST 2018 tool competition. , 2018, , .		5
11	A Tutorial on Using and Extending the EvoSuite Search-Based Test Generator. Lecture Notes in Computer Science, 2018, , 106-130.	1.3	7
12	An empirical evaluation of evolutionary algorithms for unit test suite generation. Information and Software Technology, 2018, 104, 207-235.	4.4	66
13	A detailed investigation of the effectiveness of whole test suite generation. Empirical Software Engineering, 2017, 22, 852-893.	3.9	69
14	Private API Access and Functional Mocking in Automated Unit Test Generation. , 2017, , .		27
15	An Empirical Evaluation of Evolutionary Algorithms for Test Suite Generation. Lecture Notes in Computer Science, 2017, , 33-48.	1.3	15
16	Is Search-Based Unit Test Generation Research Stuck in a Local Optimum?. , 2017, , .		5
17	An Industrial Evaluation of Unit Test Generation: Finding Real Faults in a Financial Application. , 2017, , .		95
18	Code Defenders: Crowdsourcing Effective Tests and Subtle Mutants with a Mutation Testing Game. , 2017, , .		31

#	ARTICLE	IF	CITATIONS
19	Disposable Testing: Avoiding Maintenance of Generated Unit Tests by Throwing Them Away. , 2017, , .		1
20	Teaching Software Testing Concepts Using a Mutation Testing Game. , 2017, , .		35
21	EvoSuite at the SBST 2016 tool competition. , 2016, , .		25
22	Code Defenders: A Mutation Testing Game. , 2016, , .		30
23	Seeding strategies in search€based unit test generation. Software Testing Verification and Reliability, 2016, 26, 366-401.	2.0	59
24	A Survey on Metamorphic Testing. IEEE Transactions on Software Engineering, 2016, 42, 805-824.	5.6	334
25	Java Enterprise Edition Support inÂSearch-Based JUnit Test Generation. Lecture Notes in Computer Science, 2016, , 3-17.	1.3	9
26	Assessing and generating test sets in terms of behavioural adequacy. Software Testing Verification and Reliability, 2015, 25, 749-780.	2.0	22
27	Generating TCP/UDP network data for automated unit test generation. , 2015, , .		16
28	Parameter Control in Search-Based Generation of Unit Test Suites. Lecture Notes in Computer Science, 2015, , 141-156.	1.3	3
29	Do Automatically Generated Unit Tests Find Real Faults? An Empirical Study of Effectiveness and Challenges (T). , 2015, , .		152
30	Random or Genetic Algorithm Search for Object-Oriented Test Suite Generation?. , 2015, , .		38
31	Using Dynamic Symbolic Execution to Generate Inputs in Search-Based GUI Testing. , 2015, , .		5
32	1600 faults in 100 projects: automatically finding faults while achieving high coverage with EvoSuite. Empirical Software Engineering, 2015, 20, 611-639.	3.9	76
33	Achieving scalable mutation-based generation of whole test suites. Empirical Software Engineering, 2015, 20, 783-812.	3.9	78
34	A Memetic Algorithm for whole test suite generation. Journal of Systems and Software, 2015, 103, 311-327.	4.5	57
35	Continuous Test Generation on Guava. Lecture Notes in Computer Science, 2015, , 228-234.	1.3	1
36	A Large-Scale Evaluation of Automated Unit Test Generation Using EvoSuite. ACM Transactions on Software Engineering and Methodology, 2014, 24, 1-42.	6.0	157

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37	Search‐based testing using constraint‐based mutation. Software Testing Verification and Reliability, 2014, 24, 472-495.	2.0	4
38	Guest editorial: Search-based software engineering. Empirical Software Engineering, 2014, 19, 1421-1422.	3.9	1
39	On the Effectiveness of Whole Test Suite Generation. Lecture Notes in Computer Science, 2014, , 1-15.	1.3	11
40	EvoSuite at the Second Unit Testing Tool Competition. Lecture Notes in Computer Science, 2014, , 95-100.	1.3	2
41	Guest editorial: search-based software engineering. Empirical Software Engineering, 2014, 19, 1421.	3.9	0
42	EvoSuite: On the Challenges of Test Case Generation in the Real World. , 2013, , .		47
43	Parameter tuning or default values? An empirical investigation in search-based software engineering. Empirical Software Engineering, 2013, 18, 594-623.	3.9	264
44	Search-Based Propagation of Regression Faults in Automated Regression Testing. , 2013, , .		6
45	Guest editor's introduction to the special section on tests and proofs. Software Quality Journal, 2013, 21, 99-100.	2.2	0
46	Whole Test Suite Generation. IEEE Transactions on Software Engineering, 2013, 39, 276-291.	5.6	425
47	Test suite generation with memetic algorithms. , 2013, , .		20
48	EvoSuite at the SBST 2013 Tool Competition. , 2013, , .		25
49	Handling test length bloat. Software Testing Verification and Reliability, 2013, 23, 553-582.	2.0	18
50	Search-based system testing: high coverage, no false alarms. , 2012, , .		80
51	Behaviourally Adequate Software Testing. , 2012, , .		17
52	The Seed is Strong: Seeding Strategies in Search-Based Software Testing. , 2012, , .		70
53	Sound empirical evidence in software testing. , 2012, , .		69
54	Guest Editorial for the Special Issue on Model-Based Testing. Software Testing Verification and Reliability, 2012, 22, 295-296.	2.0	0

#	Article	IF	Citations
55	Mutation-Driven Generation of Unit Tests and Oracles. IEEE Transactions on Software Engineering, 2012, 38, 278-292.	5.6	226
56	It is Not the Length That Matters, It is How You Control It. , 2011, , .		19
57	Combining search-based and constraint-based testing. , 2011, , .		55
58	EvoSuite. , 2011, , .		651
59	Exploiting Common Object Usage in Test Case Generation. , 2011, , .		39
60	Evolutionary Generation of Whole Test Suites. , 2011, , .		93
61	On Parameter Tuning in Search Based Software Engineering. Lecture Notes in Computer Science, 2011, , 33-47.	1.3	96
62	Testing Container Classes: Random or Systematic?. Lecture Notes in Computer Science, 2011, , 262-277.	1.3	40
63	Mutation-driven generation of unit tests and oracles. , 2010, , .		101
64	Experiments on the test case length in specification based test case generation. , 2009, , .		18