Dave Towey

List of Publications by Year
in descending order

106 papers	1,653 citations	471061 17 h-index	360668 35 g-index
107 all docs	107 docs citations	107 times ranked	697 citing authors

#	Article	IF	Citations
1	Dynamic Random Testing of Web Services: A Methodology and Evaluation. IEEE Transactions on Services Computing, 2022, 15, 736-751.	3.2	6
2	Candidate test set reduction for adaptive random testing: An overheads reduction technique. Science of Computer Programming, 2022, 214, 102730.	1.5	3
3	TAFFIES: Tailored Automated Feedback Framework for Developing Integrated and Extensible Feedback Systems. SN Computer Science, 2022, 3, 159.	2.3	1
4	Preparing Future SQA Professionals: An Experience Report of Metamorphic Exploration of an Autonomous Driving System. , 2022, , .		2
5	Summary of SWFC-ART: A Cost-effective Approach for Fixed-Size-Candidate-Set Adaptive Random Testing through Small World Graphs. , 2022, , .		0
6	A Survey on Adaptive Random Testing. IEEE Transactions on Software Engineering, 2021, 47, 2052-2083.	4.3	55
7	Covering Array Constructors: An Experimental Analysis of Their Interaction Coverage and Fault Detection. Computer Journal, 2021, 64, 762-788.	1.5	2
8	Trustworthiness prediction of cloud services based on selective neural network ensemble learning. Expert Systems With Applications, 2021, 168, 114390.	4.4	15
9	Not a Silver Bullet, but a Silver Lining: Metamorphic Marking Administration. , 2021, , .		1
10	Towards Post-pandemic Transformative Teaching and Learning. SN Computer Science, 2021, 2, 271.	2.3	15
11	MT4NS: Metamorphic Testing for Network Scanning. , 2021, , .		9
12	Enhancing Euro NCAP Standards with Metamorphic Testing for Verification of Advanced Driver-Assistance Systems. , 2021, , .		4
13	Creating a Virtual Reality OER Application to Teach Web Accessibility. , 2021, , .		3
14	Metamorphic Testing for Block Ciphers. , 2021, , .		0
15	Remote Software Development: A Student-staff Collaboration to Build a Showcase Platform for Non-traditional Digital Artefacts. , 2021, , .		1
16	Metamorphic Testing of Fake News Detection Software. , 2021, , .		3
17	SWFC-ART: A cost-effective approach for Fixed-Size-Candidate-Set Adaptive Random Testing through small world graphs. Journal of Systems and Software, 2021, 180, 111008.	3.3	3
18	Using metamorphic relations to verify and enhance Artcode classification. Journal of Systems and Software, 2021, 182, 111060.	3.3	4

#	Article	IF	Citations
19	MTKeras: An Automated Metamorphic Testing Platform. International Journal of Software Engineering and Knowledge Engineering, 2021, 31, 1235-1249.	0.6	0
20	Sensor Networks and Personal Health Data Management: Software Engineering Challenges. Advances in Intelligent Systems and Computing, 2021, , 140-159.	0.5	0
21	Metamorphic Testing: Testing the Untestable. IEEE Software, 2020, 37, 46-53.	2.1	59
22	Abstract Test Case Prioritization Using Repeated Small-Strength Level-Combination Coverage. IEEE Transactions on Reliability, 2020, 69, 349-372.	3.5	9
23	Metamorphic Relations for Enhancing System Understanding and Use. IEEE Transactions on Software Engineering, 2020, 46, 1120-1154.	4.3	66
24	Poster: Is Euclidean Distance the best Distance Measurement for Adaptive Random Testing?. , 2020, , .		10
25	Developing a pedagogical photoreal virtual environment to teach civil engineering. Interactive Technology and Smart Education, 2020, 17, 303-321.	3.8	13
26	CHOCSLAT: Chinese Healthcare-Oriented Computerised Speech & Language Assessment Tools. , 2020, , .		1
27	A Virtual Reality OER Platform to Deliver Phobia-Motivated Experiences. , 2020, , .		3
28	An empirical comparison of commercial and open€source web vulnerability scanners. Software - Practice and Experience, 2020, 50, 1842-1857.	2.5	24
29	Regression test case prioritization by code combinations coverage. Journal of Systems and Software, 2020, 169, 110712.	3.3	18
30	ARCAMETES. , 2020, , .		0
31	Can Clicker Technology and the Latest Online Response Systems Enhance Student Engagement? A Comparative Study of Two Approaches. Lecture Notes in Educational Technology, 2020, , 287-301.	0.5	3
32	Program Slicing and Execution Tracing for Differential Testing at Adobe Analytics. , 2020, , .		1
33	An improved fuzzing approach based on adaptive random testing. , 2020, , .		2
34	Metamorphic Testing. ACM Computing Surveys, 2019, 51, 1-27.	16.1	234
35	Metamorphic Exploration of an Unsupervised Clustering Program. , 2019, , .		8
36	Sensor Networks and Data Management in Healthcare: Emerging Technologies and New Challenges. , 2019, , .		18

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37	An Extended Abstract of "Metamorphic Testing: Testing the Untestable". , 2019, , .		1
38	One-Domain-One-Input: Adaptive Random Testing by Orthogonal Recursive Bisection With Restriction. IEEE Transactions on Reliability, 2019, 68, 1404-1428.	3.5	11
39	Exploring user behavioral data for adaptive cybersecurity. User Modeling and User-Adapted Interaction, 2019, 29, 701-750.	2.9	18
40	Embracing ambiguity. Interactive Technology and Smart Education, 2019, 16, 143-158.	3.8	4
41	Preparing Software Quality Assurance Professionals: Metamorphic Exploration for Machine Learning. , 2019, , .		1
42	Creating a 4D Photoreal VR Environment to Teach Civil Engineering. , 2019, , .		6
43	Prioritising abstract test cases: an empirical study. IET Software, 2019, 13, 313-326.	1.5	2
44	OER: Six Perspectives on Global Misconceptions and Challenges. , 2019, , .		4
45	Test case prioritization for object-oriented software: An adaptive random sequence approach based on clustering. Journal of Systems and Software, 2018, 135, 107-125.	3.3	58
46	Fault localisation for WS-BPEL programs based on predicate switching and program slicing. Journal of Systems and Software, 2018, 135, 191-204.	3.3	11
47	On the Selection of Strength for Fixed-Strength Interaction Coverage Based Prioritization. , 2018, , .		2
48	Harnessing OERs in Hong Kong Technical and Vocational Education and Training (TVET). , 2018, , .		2
49	An Empirical Comparison of Fixed-Strength and Mixed-Strength for Interaction Coverage Based Prioritization. IEEE Access, 2018, 6, 68350-68372.	2.6	4
50	Developing a Language Learning Application OER. , 2018, , .		5
51	Developing Virtual Reality Open Educational Resources in a Sino-Foreign Higher Education Institution: Challenges and Strategies. , 2018, , .		9
52	An experimental analysis of fault detection capabilities of covering array constructors. , 2018, , .		0
53	A monte carlo method for metamorphic testing of machine translation services. , 2018, , .		12
54	Metamorphic testing for adobe analytics data collection javascript library. , 2018, , .		4

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55	Enhancing supervised classifications with metamorphic relations. , 2018, , .		3
56	Students as co-producers in a multidisciplinary software engineering project: addressing cultural distance and cross-cohort handover. Teachers and Teaching: Theory and Practice, 2018, 24, 840-853.	0.9	15
57	A metamorphic testing approach for supporting program repair without the need for a test oracle. Journal of Systems and Software, 2017, 126, 127-140.	3.3	30
58	A Similarity Metric for the Inputs of OO Programs and Its Application in Adaptive Random Testing. IEEE Transactions on Reliability, 2017, 66, 373-402.	3.5	25
59	An Empirical Examination of Abstract Test Case Prioritization Techniques. , 2017, , .		11
60	Measuring attitude towards personal data for adaptive cybersecurity. Information and Computer Security, 2017, 25, 560-579.	1.5	17
61	Students as Partners in a Multi-Media Note-Taking App Development: Best Practices. , 2017, , .		14
62	Recognizing the Presence of Hidden Visual Markers in Digital Images. , 2017, , .		2
63	Detecting Implicit Security Exceptions Using an Improved Variable-Length Sequential Pattern Mining Method. International Journal of Software Engineering and Knowledge Engineering, 2017, 27, 1235-1268.	0.6	1
64	An Empirical Comparison of Similarity Measures for Abstract Test Case Prioritization. , 2017, , .		8
65	Developing an Open Educational Resource: Reflections on a Student-Staff Collaboration. , 2017, , .		12
66	Developing an automated coding tutorial OER. , 2017, , .		8
67	Open educational resource (OER) adoption in higher education: Challenges and strategies. , 2017, , .		23
68	Prioritizing random combinatorial test suites. , 2017, , .		2
69	A transformation-based approach to testing concurrent programs using UML activity diagrams. Software - Practice and Experience, 2016, 46, 551-576.	2.5	6
70	An Augmented Cybersecurity Behavioral Research Model. , 2016, , .		2
71	An extended perspective on cybersecurity education. , 2016, , .		2
72	Open Educational Resources (OERs) and Technology Enhanced Learning (TEL) in Vocational and Professional Education and Training (VPET). , 2016, , .		3

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73	Metamorphic testing: A new student engagement approach for a new software testing paradigm. , 2016, , .		9
74	An Adaptive Sequence Approach for OOS Test Case Prioritization. , 2016, , .		8
75	Prioritizing Interaction Test Suites Using Repeated Base Choice Coverage. , 2016, , .		8
76	MT4WS: an automated metamorphic testing system for web services. International Journal of High Performance Computing and Networking, 2016, 9, 104.	0.4	8
77	A random and coverage-based approach for fault localization prioritization. , 2016, , .		5
78	Metamorphic Testing for Cybersecurity. Computer, 2016, 49, 48-55.	1.2	64
79	Metamorphic testing as a test case selection strategy. Science China Information Sciences, 2016, 59, 1.	2.7	2
80	Exploring young students' learning experiences with the iPad: a comparative study in Hong Kong international primary schools. Universal Access in the Information Society, 2016, 15, 359-367.	2.1	3
81	Challenges to flipped classroom adoption in Hong Kong secondary schools: Overcoming the first- and second- order barriers to change. , 2015, , .		9
82	Researching and supporting student note-taking: Building a multimedia note-taking app. , 2015, , .		9
83	Using Partition Information to Prioritize Test Cases for Fault Localization. , 2015, , .		11
84	Lessons from a failed flipped classroom: The hacked computer science teacher. , 2015, , .		20
85	Teaching software testing skills: Metamorphic testing as vehicle for creativity and effectiveness in software testing. , 2015, , .		5
86	Search-based QoS ranking prediction for web services in cloud environments. Future Generation Computer Systems, 2015, 50, 111-126.	4.9	39
87	A revisit of three studies related to random testing. Science China Information Sciences, 2015, 58, 1-9.	2.7	56
88	On the Relationship between Model Coverage and Code Coverage Using MATLAB's Simulink. , 2015, , .		1
89	Aggregate-strength interaction test suite prioritization. Journal of Systems and Software, 2015, 99, 36-51.	3.3	16
90	Worst-input mutation approach to web services vulnerability testing based on SOAP messages. Tsinghua Science and Technology, 2014, 19, 429-441.	4.1	9

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91	A Web services vulnerability testing approach based on combinatorial mutation and SOAP message mutation. Service Oriented Computing and Applications, 2014, 8, 1-13.	1.3	24
92	How Effectively Does Metamorphic Testing Alleviate the Oracle Problem?. IEEE Transactions on Software Engineering, 2014, 40, 4-22.	4.3	162
93	New Metrics for Prioritized Interaction Test Suites. IEICE Transactions on Information and Systems, 2014, E97.D, 830-841.	0.4	3
94	A Mobile Virtual Environment game approach for improving student learning performance in integrated science classes in Hong Kong International Schools. , 2013, , .		9
95	PRIORITIZATION OF COMBINATORIAL TEST CASES BY INCREMENTAL INTERACTION COVERAGE. International Journal of Software Engineering and Knowledge Engineering, 2013, 23, 1427-1457.	0.6	17
96	Metamorphic Testing: Applications and Integration with Other Methods: Tutorial Synopsis. , 2012, , .		8
97	A rethinking of digital learning device projects. , 2012, , .		8
98	Using social networking to enhance the EFL classroom. , 2011, , .		2
99	Teaching introductory information technology through English in China: Innovative approaches to information technology education. , 2010, , .		1
100	Probabilistic Adaptive Random Testing. Proceedings International Conference on Quality Software, 2006, , .	0.0	4
101	Forgetting Test Cases. , 2006, , .		39
102	RESTRICTED RANDOM TESTING: ADAPTIVE RANDOM TESTING BY EXCLUSION. International Journal of Software Engineering and Knowledge Engineering, 2006, 16, 553-584.	0.6	68
103	Good Random Testing. Lecture Notes in Computer Science, 2004, , 200-212.	1.0	7
104	Normalized Restricted Random Testing. Lecture Notes in Computer Science, 2003, , 368-381.	1.0	20
105	Restricted Random Testing. Lecture Notes in Computer Science, 2002, , 321-330.	1.0	50
106	Dissimilarityâ€based test case prioritization through data fusion. Software - Practice and Experience, 0, , .	2.5	3