Hironori Washizaki

List of Publications by Year
in descending order

176 papers	1,192 citations	759233 12 h-index	713466 21 g-index
178 all docs	178 docs citations	178 times ranked	663 citing authors

#	Article	IF	Citations
1	Comparative Evaluation of NLP-Based Approaches for Linking CAPEC Attack Patterns from CVE Vulnerability Information. Applied Sciences (Switzerland), 2022, 12, 3400.	2.5	5
2	Categorization and Visualization of Issue Tickets to Support Understanding of Implemented Features in Software Development Projects. Applied Sciences (Switzerland), 2022, 12, 3222.	2.5	1
3	Abstract security patterns and the design of secure systems. Cybersecurity, 2022, 5, .	4.7	5
4	The Competency-based Computing Curricula 2020 and SFIA V7 comparison focusing on Digital Transformation Age. , 2022, , .		0
5	WOJR: A Recommendation System for Providing Similar Problems to Programming Assignments. Applied System Innovation, 2022, 5, 53.	4.6	0
6	Data-Driven Persona Retrospective Based on Persona Significance Index in B-to-B Software Development. International Journal of Software Engineering and Knowledge Engineering, 2021, 31, 117-146.	0.8	1
7	Work-in-Progress: Analysis of the use of Mentoring with Online Mob Programming. , 2021, , .		0
8	Analysis of IoT Pattern Descriptions. , 2021, , .		2
9	Tracing CVE Vulnerability Information to CAPEC Attack Patterns Using Natural Language Processing Techniques. Information (Switzerland), 2021, 12, 298.	2.9	17
10	CSPM. International Journal of Systems and Software Security and Protection, 2021, 12, 68-85.	0.3	4
11	Automated Educational Program Mapping on Learning Standards in Computer Science. , 2021, , .		0
12	The design of secure IoT applications using patterns: State of the art and directions for research. Internet of Things (Netherlands), 2021, 15, 100408.	7.7	10
13	Comparing Participants' Brainwaves During Solo, Pair, and Mob Programming. Lecture Notes in Business Information Processing, 2021, , 200-209.	1.0	0
14	Systematic Literature Review of Security Pattern Research. Information (Switzerland), 2021, 12, 36.	2.9	9
15	Validation of Rubric Evaluation for Programming Education. Education Sciences, 2021, 11, 656.	2.6	4
16	Feature Extraction Method for Cross-Architecture Binary Vulnerability Detection. , 2021, , .		1
17	Deep Cross-Project Software Reliability Growth Model Using Project Similarity-Based Clustering. Mathematics, 2021, 9, 2945.	2.2	0
18	Body of Knowledge Model and Linked Data Applied in Development of Higher Education Curriculum. Advances in Intelligent Systems and Computing, 2020, , 758-773.	0.6	2

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19	PVC.js: visualizing C programs on web browsers for novices. Heliyon, 2020, 6, e03806.	3.2	6
20	Practitioners' insights on machine-learning software engineering design patterns: a preliminary study. , 2020, , .		8
21	Landscape of Architecture and Design Patterns for IoT Systems. IEEE Internet of Things Journal, 2020, 7, 10091-10101.	8.7	32
22	Generating Linear Temporal Logics Based on Property Specification Templates. Studies in Computational Intelligence, 2020, , 1-15.	0.9	0
23	Framework and Value-Driven Process of Software Engineering for Business and Society (SE4BS). , 2020, , .		1
24	Automated Tool for Revising Masking MC/DC Test Suite. , 2020, , .		0
25	Is Fragmentation a Threat to the Success of the Internet of Things?. IEEE Internet of Things Journal, 2019, 6, 472-487.	8.7	33
26	Applying Gamification to Motivate Students to Write High-Quality Code in Programming Assignments. , 2019, , .		16
27	WSQF: Comprehensive Software Quality Evaluation Framework and Benchmark Based on SQuaRE. , 2019, , .		17
28	Metrics Driven Architectural Analysis using Dependency Graphs for C Language Projects. , 2019, , .		1
29	Towards A Knowledge Base for Software Developers to Choose Suitable Traceability Techniques. Procedia Computer Science, 2019, 159, 1075-1084.	2.0	0
30	Horizontal Relation Identification Method to Handle Misalignment of Goals and Strategies Across Organizational Units. IEEE Access, 2019, 7, 89766-89776.	4.2	4
31	Mob Programming: A Systematic Literature Review. , 2019, , .		1
32	Reduce Test Cost by Reusing Test Oracles through Combinatorial Join. , 2019, , .		1
33	Learning Effects in Programming Learning Using Python and Raspberry Pi: Case Study with Elementary School Students. , 2019, , .		0
34	DC-SRGM: Deep Cross-Project Software Reliability Growth Model. , 2019, , .		3
35	A System for Seamless Support from Security Requirements Analysis to Security Design Using a Software Security Knowledge Base. , 2019, , .		1
36	Effects of Software Modifications and Development After an Organizational Change on Software Metrics Value. IEICE Transactions on Information and Systems, 2019, E102.D, 1693-1695.	0.7	0

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37	The Proposal of Model Transformation Support Method Based on Model Editing Operation History. , 2019, , .		0
38	Categorizing and Visualizing Issue Tickets to Better Understand the Features Implemented in Existing Software Systems. , 2019, , .		1
39	Industrial Case Study on Time Series Analysis of Metrics Changes Based on GQM Models. , 2019, , .		2
40	Recovering Transitive Traceability Links among Various Software Artifacts for Developers. IEICE Transactions on Information and Systems, 2019, E102.D, 1750-1760.	0.7	1
41	Designing Secure Software by Testing Application of Security Patterns. Advances in Information Security, Privacy, and Ethics Book Series, 2019, , 136-169.	0.5	2
42	Metrics Visualization Techniques Based on Historical Origins and Functional Layers for Developments by Multiple Organizations. International Journal of Software Engineering and Knowledge Engineering, 2018, 28, 123-147.	0.8	2
43	ProMeTA: a taxonomy for program metamodels in program reverse engineering. Empirical Software Engineering, 2018, 23, 2323-2358.	3.9	4
44	Empirical Study on Specification Metrics to Predict Volatility and Software Defects. , 2018, , .		1
45	An Empirical Study on the Reliability of the Web API Document. , 2018, , .		2
46	Improving GQM+Strategies with Balanced Scorecard's Perspectives: A Feasibility Study. , 2018, , .		1
47	Empirical Study on Tendencies for Unstable Situations in Application Results of Software Reliability Growth Model. , 2018, , .		2
48	Using Security Patterns to Develop Secure Systems—Ten Years Later. International Journal of Systems and Software Security and Protection, 2018, 9, 46-57.	0.3	1
49	Evaluating the degree of security of a system built using security patterns. , 2018, , .		3
50	Characteristics of Unmaintainable Source Code in Software Development by Multiple Organizations. , 2018, , .		1
51	Student placement and skill ranking predictors for programming classes using class attitude, psychological scales, and code metrics. Research and Practice in Technology Enhanced Learning, 2018, 13, 7.	3.2	18
52	Retrospective based on data-driven persona significance in B-to-B software development. , 2018, , .		6
53	Test Case Reduction Based on the Join Condition in Pairwise Coverage-Based Database Testing. , 2018, , .		0
54	Security Requirement Modeling Support System Using Software Security Knowledge Base. , 2018, , .		3

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55	Machine Learning to Evaluate Evolvability Defects: Code Metrics Thresholds for a Given Context. , 2018, , .		4
56	Body of Knowledge on IoT Education. , 2018, , .		2
57	Experimental Evaluation of HoRIM to Improve Business Strategy Models. Studies in Computational Intelligence, 2018, , 43-56.	0.9	1
58	Impact of Using a Static-Type System in Computer Programming. , 2017, , .		0
59	Pitfalls and Countermeasures in Software Quality Measurements and Evaluations. Advances in Computers, 2017, , 1-22.	1.6	2
60	Knowledge description model for bodies of knowledge in software engineering context. , 2017, , .		6
61	Generalized Software Reliability Model Considering Uncertainty and Dynamics: Model and Applications. International Journal of Software Engineering and Knowledge Engineering, 2017, 27, 967-993.	0.8	14
62	Preliminary Systematic Literature Review of Software and Systems Traceability. Procedia Computer Science, 2017, 112, 1141-1150.	2.0	8
63	Evaluating the work of experienced and inexperienced developers considering work difficulty in sotware development. , 2017, , .		0
64	Utilization of ICTs in quality assurance and accreditation of higher education: Systematic literature review. , 2017, , .		5
65	Goal Modelling for Security Problem Matching and Pattern Enforcement. International Journal of Secure Software Engineering, 2017, 8, 42-57.	0.4	5
66	Modeling and Security in Cloud Ecosystems. Future Internet, 2016, 8, 13.	3.8	21
67	Implementation Support of Security Design Patterns Using Test Templates. Information (Switzerland), 2016, 7, 34.	2.9	9
68	Metrics Visualization Technique Based on the Origins and Function Layers for OSS-Based Development. , 2016, , .		3
69	Iterative process to improve GQM models with metrics thresholds to detect high-risk files. , 2016, , .		1
70	A SQuaRE-based software quality evaluation framework and its case study. , 2016, , .		10
71	Case Study: Project Management Using Cross Project Software Reliability Growth Model Considering System Scale. , 2016, , .		3
72	A Taxonomy for Program Metamodels in Program Reverse Engineering. , 2016, , .		4

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73	Curricular design based in bodies of knowledge: Engineering education for the innovation and the industry. , 2016, , .		25
74	Literature Survey on Technologies for Developing Privacy-Aware Software. , 2016, , .		6
75	Initial Framework for Software Quality Evaluation Based on ISO/IEC 25022 and ISO/IEC 25023. , 2016, , .		11
76	Pairwise Coverage-Based Testing with Selected Elements in a Query for Database Applications. , 2016, , .		6
77	Influence of the Programming Environment on Programming Education. , 2016, , .		4
78	A Metamodel for Security and Privacy Knowledge in Cloud Services. , 2016, , .		4
79	Case Study: Project Management Using Cross Project Software Reliability Growth Model. , 2016, , .		3
80	An Industrial Case Study of Project Management Using Cross Project Software Reliability Growth Model. , 2016, , .		0
81	Exhaustive and Efficient Identification of Rationales Using GQM+Strategies with Stakeholder Relationship Analysis. IEICE Transactions on Information and Systems, 2016, E99.D, 2219-2228.	0.7	3
82	GO-MUC. , 2016, , .		4
83	Identifying Misalignment of Goal and Strategies Across Organizational Units by Interpretive Structural Modeling. , 2016, , .		6
84	Learning Effectiveness of Team Discussions in Various Software Engineering Education Courses. , 2016, , .		8
85	Which Combinations of Personal Characteristic Types are more Effective in Different Project-Based Learning Courses?. , 2016, , .		0
86	Finding and Emulating Keyboard, Mouse, and Touch Interactions and Gestures while Crawling RIAs. International Journal of Software Engineering and Knowledge Engineering, 2015, 25, 1777-1782.	0.8	0
87	Improving writer's workshop by introducing checklist and perspectives. , 2015, , .		1
88	Recovering Traceability Links between Requirements and Source Code Using the Configuration Management Log. IEICE Transactions on Information and Systems, 2015, E98.D, 852-862.	0.7	12
89	A Third-Party Extension Support Framework Using Patterns. , 2015, , .		0
90	TESEM: A Tool for Verifying Security Design Pattern Applications by Model Testing. , 2015, , .		4

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91	Detection of unexpected situations by applying software reliability growth models to test phases. , 2015, , .		5
92	Work in progress: A comparison of programming way: Illustration-based programming and text-based programming. , 2015, , .		3
93	Recovering transitive traceability links among software artifacts. , 2015, , .		15
94	Patterns for security and privacy in cloud ecosystems. , 2015, , .		15
95	History-Based Test Case Prioritization for Black Box Testing Using Ant Colony Optimization. , 2015, , .		23
96	A Case-based Management System for Secure Software Development Using Software Security Knowledge. Procedia Computer Science, 2015, 60, 1092-1100.	2.0	7
97	Predicting Release Time for Open Source Software Based on the Generalized Software Reliability Model. , 2015, , .		11
98	Case Base for Secure Software Development Using Software Security Knowledge Base. , 2015, , .		4
99	Interactive Recovery of Requirements Traceability Links Using User Feedback and Configuration Management Logs. Lecture Notes in Computer Science, 2015, , 247-262.	1.3	8
100	Finding and Emulating Keyboard, Mouse, and Touch Interactions and Gestures while Crawling RIAâ€™s. , 2015, , .		0
101	How Does Defect Removal Activity of Developer Vary with Development Experience?. , 2015, , .		4
102	Verifying Implementation of Security Design Patterns Using a Test Template. , 2014, , .		6
103	Predicting Time Range of Development Based on Generalized Software Reliability Model. , 2014, , .		7
104	Initial Industrial Experience of GQM-Based Product-Focused Project Monitoring with Trend Patterns. , 2014, , .		8
105	Continuous Product-Focused Project Monitoring with Trend Patterns and GQM. , 2014, , .		1
106	A Gamified Tool for Motivating Developers to Remove Warnings of Bug Pattern Tools. , 2014, , .		35
107	A Tool to Suggest Similar Program Element Modifications. , 2014, , .		0
108	Validating ajax applications using a delay-based mutation technique. , 2014, , .		4

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109	Network Analysis for Software Patterns Including Organizational Patterns in Portland Pattern Repository. , 2014, , .		4
110	Efficient Identification of Rationales by Stakeholder Relationship Analysis to Refine and Maintain GQM+Strategies Models. Communications in Computer and Information Science, 2014, , 77-82.	0.5	6
111	Semi-automatic Incompatibility Localization for Re-engineered Industrial Software. , 2014, , .		1
112	The impacts of personal characteristic on educational effectiveness in controlled-project based learning on software intensive systems development. , 2014, , .		15
113	Predicting Release Time Based on Generalized Software Reliability Model (GSRM). , 2014, , .		6
114	Using an Automatic Collection Method to Identify Patterns during Design Activity. Communications in Computer and Information Science, 2014, , 491-504.	0.5	1
115	Evaluating Structural Validity of Class Diagrams by Measuring the Number of Highly Responsible Classes. , 2014, , .		1
116	Validating Security Design Pattern Applications by Testing Design Models. International Journal of Secure Software Engineering, 2014, 5, 1-30.	0.4	5
117	Identifying Rationales of Strategies by Stakeholder Relationship Analysis to Refine and Maintain GQM+Strategies Models. Lecture Notes in Computer Science, 2014, , 78-92.	1.3	5
118	Recovering traceability links between requirements and source code in the same series of software products. , 2013, , .		19
119	Team characteristics for maximizing the educational effectiveness of practical lectures on software intensive systems development. , 2013, , .		5
120	Goal-oriented requirements analysis and an extended design pattern using scala for artificial intelligence programming contests. , 2013, , .		1
121	OCCF: A Framework for Developing Test Coverage Measurement Tools Supporting Multiple Programming Languages. , 2013, , .		8
122	Effects of Organizational Changes on Product Metrics and Defects. , 2013, , .		8
123	Analyzing Effectiveness of Workshops for Learning Agile Development Principles. , 2013, , .		1
124	Automated verification of pattern-based interaction invariants in Ajax applications. , 2013, , .		3
125	Validating Security Design Patterns Application Using Model Testing. , 2013, , .		6
126	POGen: A Test Code Generator Based on Template Variable Coverage in Gray-Box Integration Testing for Web Applications. Lecture Notes in Computer Science, 2013, , 343-358.	1.3	3

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127	A Generalized Software Reliability Model Considering Uncertainty and Dynamics in Development. Lecture Notes in Computer Science, 2013, , 342-346.	1.3	13
128	Joint Workshop of the 5thInternational Workshop on Model-Driven Approaches in Software Product Line Engineering and the 4thWorkshop on Scalable Modeling Techniques for Software Product Lines (MAPLE/SCALE 2013). , 2013, , .		0
129	UniAspect. , 2012, , .		2
130	Extracting Interaction-Based Stateful Behavior in Rich Internet Applications. , 2012, , .		6
131	Supporting commonality and variability analysis of requirements and structural models. , 2012, , .		12
132	Estimate of the Appropriate Iteration Length in Agile Development by Conducting Simulation. , 2012, , .		3
133	Reusability Metrics for Program Source Code Written in C Language and Their Evaluation. Lecture Notes in Computer Science, 2012, , 89-103.	1.3	9
134	An Approach to Model-based Development of Secure and Reliable Systems. , 2011, , .		7
135	Mining analysis patterns by structure and word similarity. , 2011, , .		0
136	Open Code Coverage Framework: A Framework for Consistent, Flexible and Complete Measurement of Test Coverage Supporting Multiple Programming Languages. IEICE Transactions on Information and Systems, 2011, E94-D, 2418-2430.	0.7	1
137	Selection of metrics for predicting the appropriate application of design patterns. , 2011, , .		6
138	Evaluation of Understandability of UML Class Diagrams by Using Word Similarity. , 2011, , .		7
139	Using Security Patterns to Develop Secure Systems. , 2011, , 16-31.		16
140	Security Patterns. , 2011, , 75-111.		8
141	Open Code Coverage Framework: A Consistent and Flexible Framework for Measuring Test Coverage Supporting Multiple Programming Languages. , 2010, , .		10
142	Measuring the Level of Security Introduced by Security Patterns. , 2010, , .		4
143	Model-Driven Security Patterns Application Based on Dependences among Patterns. , 2010, , .		7
144	A worm misuse pattern. , 2010, , .		4

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145	A pattern for reconstructing test code based on test coverage. , 2010, , .		0
146	TCD: A Text-Based UML Class Diagram Notation and Its Model Converters. Communications in Computer and Information Science, 2010, , 296-302.	0.5	3
147	Modeling Misuse Patterns. , 2009, , .		30
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163	1st International workshop on software patterns and quality (SPAQu'07). , 2007, , .		2
164	A Framework for Measuring and Evaluating Program Source Code Quality. Lecture Notes in Computer Science, 2007, , 284-299.	1.3	19
165	Quality Evaluation of Embedded Software in Robot Software Design Contest. Progress in Informatics, 2007, , 63.	0.2	1
166	A Coupling-based Complexity Metric for Remote Component-based Software Systems Toward Maintainability Estimation. , 2006, , .		12
167	Experiments on quality evaluation of embedded software in Japan robot software design contest. , 2006, , .		7
168	Deriving Project-Specific Processes from Process Line Architecture with Commonality and Variability. , 2006, , .		9
169	A precise estimation technique for test coverage of components in object-oriented frameworks. , 2006, , .		2
170	Partial and On-Demand Incremental Deployment of Java Application Program over the Internet. , 2006, , .		0
171	A technique for automatic component extraction from object-oriented programs by refactoring. Science of Computer Programming, 2005, 56, 99-116.	1.9	40
172	Relation Analysis Among Patterns on Software Development Process. Lecture Notes in Computer Science, 2005, , 299-313.	1.3	9
173	A search system for java programs by using extracted javaBeans components. , 2004, , .		0
174	Retrieving Software Components Using Directed Replaceability Distance. Lecture Notes in Computer Science, 2001, , 153-162.	1.3	0
175	Tracing CAPEC Attack Patterns from CVE Vulnerability Information using Natural Language Processing Technique. , 0, , .		13
176	Rubric for Measuring and Visualizing the Effects of Learning Computer Programming for Elementary School Students. Journal of Information Technology Education: Innovations in Practice, 0, 19, 203-227.	0.0	1