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	A survey on security patterns. Progress in Informatics, 2008, , 35.	0.2	121
2	A technique for automatic component extraction from object-oriented programs by refactoring. Science of Computer Programming, 2005, 56, 99-116.	1.9	40
3	A Gamified Tool for Motivating Developers to Remove Warnings of Bug Pattern Tools. , 2014, , .		35
4	Is Fragmentation a Threat to the Success of the Internet of Things?. IEEE Internet of Things Journal, 2019, 6, 472-487.	8.7	33
5	Landscape of Architecture and Design Patterns for IoT Systems. IEEE Internet of Things Journal, 2020, 7, 10091-10101.	8.7	32
6	Modeling Misuse Patterns. , 2009, , .		30
7	Curricular design based in bodies of knowledge: Engineering education for the innovation and the industry. , 2016, , .		25
8	Classifying Security Patterns. , 2008, , 342-347.		25
9	History-Based Test Case Prioritization for Black Box Testing Using Ant Colony Optimization. , 2015, , .		23
10	Modeling and Security in Cloud Ecosystems. Future Internet, 2016, 8, 13.	3.8	21
11	Improving the Classification of Security Patterns. , 2009, , .		20
12	Recovering traceability links between requirements and source code in the same series of software products. , 2013, , .		19
13	A Framework for Measuring and Evaluating Program Source Code Quality. Lecture Notes in Computer Science, 2007, , 284-299.	1.3	19
14	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
15	WSQF: Comprehensive Software Quality Evaluation Framework and Benchmark Based on SQuaRE. , 2019, , .		17
16	Tracing CVE Vulnerability Information to CAPEC Attack Patterns Using Natural Language Processing Techniques. Information (Switzerland), 2021, 12, 298.	2.9	17
17	Top SE: Educating Superarchitects Who Can Apply Software Engineering Tools to Practical Development in Japan. Proceedings - International Conference on Software Engineering, 2007, , .	0.0	16
18	AOJS. , 2009, , .		16

#	Article	IF	Citations
19	Applying Gamification to Motivate Students to Write High-Quality Code in Programming Assignments. , 2019, , .		16
20	Using Security Patterns to Develop Secure Systems. , 2011, , 16-31.		16
21	The impacts of personal characteristic on educational effectiveness in controlled-project based learning on software intensive systems development. , 2014, , .		15
22	Recovering transitive traceability links among software artifacts. , 2015, , .		15
23	Patterns for security and privacy in cloud ecosystems. , 2015, , .		15
24	Enforcing a security pattern in stakeholder goal models. , 2008, , .		14
25	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
26	Tracing CAPEC Attack Patterns from CVE Vulnerability Information using Natural Language Processing Technique. , 0, , .		13
27	A Generalized Software Reliability Model Considering Uncertainty and Dynamics in Development. Lecture Notes in Computer Science, 2013, , 342-346.	1.3	13
28	A Coupling-based Complexity Metric for Remote Component-based Software Systems Toward Maintainability Estimation. , 2006, , .		12
29	Supporting commonality and variability analysis of requirements and structural models. , 2012, , .		12
30	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
31	Predicting Release Time for Open Source Software Based on the Generalized Software Reliability Model. , 2015, , .		11
32	Initial Framework for Software Quality Evaluation Based on ISO/IEC 25022 and ISO/IEC 25023. , 2016, , .		11
33	Abstract security patterns. , 2008, , .		10
34	Open Code Coverage Framework: A Consistent and Flexible Framework for Measuring Test Coverage Supporting Multiple Programming Languages. , 2010, , .		10
35	A SQuaRE-based software quality evaluation framework and its case study. , 2016, , .		10
36	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

#	ARTICLE	IF	CITATIONS
37	Relation Analysis Among Patterns on Software Development Process. Lecture Notes in Computer Science, 2005, , 299-313.	1.3	9
38	Deriving Project-Specific Processes from Process Line Architecture with Commonality and Variability. , 2006, , .		9
39	Implementation Support of Security Design Patterns Using Test Templates. Information (Switzerland), 2016, 7, 34.	2.9	9
40	Systematic Literature Review of Security Pattern Research. Information (Switzerland), 2021, 12, 36.	2.9	9
41	Reusability Metrics for Program Source Code Written in C Language and Their Evaluation. Lecture Notes in Computer Science, 2012, , 89-103.	1.3	9
42	OCCF: A Framework for Developing Test Coverage Measurement Tools Supporting Multiple Programming Languages. , 2013, , .		8
43	Effects of Organizational Changes on Product Metrics and Defects. , 2013, , .		8
44	Initial Industrial Experience of GQM-Based Product-Focused Project Monitoring with Trend Patterns. , 2014, , .		8
45	Learning Effectiveness of Team Discussions in Various Software Engineering Education Courses. , 2016, , .		8
46	Preliminary Systematic Literature Review of Software and Systems Traceability. Procedia Computer Science, 2017, 112, 1141-1150.	2.0	8
47	Practitioners' insights on machine-learning software engineering design patterns: a preliminary study. , 2020, , .		8
48	Interactive Recovery of Requirements Traceability Links Using User Feedback and Configuration Management Logs. Lecture Notes in Computer Science, 2015, , 247-262.	1.3	8
49	Security Patterns. , 2011, , 75-111.		8
50	Experiments on quality evaluation of embedded software in Japan robot software design contest. , 2006, , .		7
51	Model-Driven Security Patterns Application Based on Dependences among Patterns. , 2010, , .		7
52	An Approach to Model-based Development of Secure and Reliable Systems. , 2011, , .		7
53	Evaluation of Understandability of UML Class Diagrams by Using Word Similarity. , 2011, , .		7
54	Predicting Time Range of Development Based on Generalized Software Reliability Model. , 2014, , .		7

#	Article	IF	Citations
55	A Case-based Management System for Secure Software Development Using Software Security Knowledge. Procedia Computer Science, 2015, 60, 1092-1100.	2.0	7
56	Detecting Design Patterns Using Source Code of Before Applying Design Patterns. , 2009, , .		6
57	Selection of metrics for predicting the appropriate application of design patterns. , 2011, , .		6
58	Extracting Interaction-Based Stateful Behavior in Rich Internet Applications. , 2012, , .		6
59	Validating Security Design Patterns Application Using Model Testing. , 2013, , .		6
60	Verifying Implementation of Security Design Patterns Using a Test Template. , 2014, , .		6
61	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
62	Predicting Release Time Based on Generalized Software Reliability Model (GSRM). , 2014, , .		6
63	Literature Survey on Technologies for Developing Privacy-Aware Software. , 2016, , .		6
64	Pairwise Coverage-Based Testing with Selected Elements in a Query for Database Applications. , 2016, , .		6
65	Identifying Misalignment of Goal and Strategies Across Organizational Units by Interpretive Structural Modeling. , 2016, , .		6
66	Knowledge description model for bodies of knowledge in software engineering context. , 2017, , .		6
67	Retrospective based on data-driven persona significance in B-to-B software development. , 2018, , .		6
68	PVC.js: visualizing C programs on web browsers for novices. Heliyon, 2020, 6, e03806.	3.2	6
69	Report on the 2nd Workshop on Software Patterns and Quality. , 2008, , .		5
70	Team characteristics for maximizing the educational effectiveness of practical lectures on software intensive systems development. , 2013, , .		5
71	Detection of unexpected situations by applying software reliability growth models to test phases. , 2015, , .		5
72	Utilization of ICTs in quality assurance and accreditation of higher education: Systematic literature review. , 2017, , .		5

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73	Goal Modelling for Security Problem Matching and Pattern Enforcement. International Journal of Secure Software Engineering, 2017, 8, 42-57.	0.4	5
74	Validating Security Design Pattern Applications by Testing Design Models. International Journal of Secure Software Engineering, 2014, 5, 1-30.	0.4	5
75	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
76	Comparative Evaluation of NLP-Based Approaches for Linking CAPEC Attack Patterns from CVE Vulnerability Information. Applied Sciences (Switzerland), 2022, 12, 3400.	2.5	5
77	Abstract security patterns and the design of secure systems. Cybersecurity, 2022, 5, .	4.7	5
78	Automatic Extraction and Verification of Page Transitions in aWeb Application. Proceedings of the Asia Pacific Software Engineering Conference, 2007, , .	0.0	4
79	Measuring the Level of Security Introduced by Security Patterns. , 2010, , .		4
80	Validating ajax applications using a delay-based mutation technique. , 2014, , .		4
81	Network Analysis for Software Patterns Including Organizational Patterns in Portland Pattern Repository. , 2014, , .		4
82	TESEM: A Tool for Verifying Security Design Pattern Applications by Model Testing. , 2015, , .		4
83	Case Base for Secure Software Development Using Software Security Knowledge Base. , 2015, , .		4
84	A Taxonomy for Program Metamodels in Program Reverse Engineering. , 2016, , .		4
85	Influence of the Programming Environment on Programming Education. , 2016, , .		4
86	A Metamodel for Security and Privacy Knowledge in Cloud Services. , 2016, , .		4
87	GO-MUC. , 2016, , .		4
88	ProMeTA: a taxonomy for program metamodels in program reverse engineering. Empirical Software Engineering, 2018, 23, 2323-2358.	3.9	4
89	Machine Learning to Evaluate Evolvability Defects: Code Metrics Thresholds for a Given Context. , 2018, , .		4
90	Horizontal Relation Identification Method to Handle Misalignment of Goals and Strategies Across Organizational Units. IEEE Access, 2019, 7, 89766-89776.	4.2	4

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91	CSPM. International Journal of Systems and Software Security and Protection, 2021, 12, 68-85.	0.3	4
92	A worm misuse pattern. , 2010, , .		4
93	Validation of Rubric Evaluation for Programming Education. Education Sciences, 2021, 11, 656.	2.6	4
94	How Does Defect Removal Activity of Developer Vary with Development Experience?. , 2015, , .		4
95	Incorporating Database Systems into a Secure Software Development Methodology. , 2008, , .		3
96	Estimate of the Appropriate Iteration Length in Agile Development by Conducting Simulation. , 2012, , .		3
97	Automated verification of pattern-based interaction invariants in Ajax applications. , 2013, , .		3
98	Work in progress: A comparison of programming way: Illustration-based programming and text-based programming. , 2015, , .		3
99	Metrics Visualization Technique Based on the Origins and Function Layers for OSS-Based Development. , 2016, , .		3
100	Case Study: Project Management Using Cross Project Software Reliability Growth Model Considering System Scale. , 2016, , .		3
101	Case Study: Project Management Using Cross Project Software Reliability Growth Model. , 2016, , .		3
102	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
103	Evaluating the degree of security of a system built using security patterns. , 2018, , .		3
104	Security Requirement Modeling Support System Using Software Security Knowledge Base. , 2018, , .		3
105	DC-SRGM: Deep Cross-Project Software Reliability Growth Model. , 2019, , .		3
106	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
107	TCD: A Text-Based UML Class Diagram Notation and Its Model Converters. Communications in Computer and Information Science, 2010, , 296-302.	0.5	3
108	A precise estimation technique for test coverage of components in object-oriented frameworks. , 2006, , .		2

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109	1st International workshop on software patterns and quality (SPAQu'07). , 2007, , .		2
110	A Metrics Suite for Measuring Quality Characteristics of JavaBeans Components. Lecture Notes in Computer Science, 2008, , 45-60.	1.3	2
111	UniAspect. , 2012, , .		2
112	Pitfalls and Countermeasures in Software Quality Measurements and Evaluations. Advances in Computers, 2017, , 1-22.	1.6	2
113	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
114	An Empirical Study on the Reliability of the Web API Document. , 2018, , .		2
115	Empirical Study on Tendencies for Unstable Situations in Application Results of Software Reliability Growth Model. , 2018, , .		2
116	Industrial Case Study on Time Series Analysis of Metrics Changes Based on GQM Models. , 2019, , .		2
117	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
118	Analysis of IoT Pattern Descriptions. , 2021, , .		2
119	Body of Knowledge on IoT Education. , 2018, , .		2
120	Designing Secure Software by Testing Application of Security Patterns. Advances in Information Security, Privacy, and Ethics Book Series, 2019, , 136-169.	0.5	2
121	1st InternationalWorkshop on Software Patterns and Quality (SPAQu'07). Proceedings of the Asia Pacific Software Engineering Conference, 2007, , .	0.0	1
122	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
123	Goal-oriented requirements analysis and an extended design pattern using scala for artificial intelligence programming contests. , 2013, , .		1
124	Analyzing Effectiveness of Workshops for Learning Agile Development Principles. , 2013, , .		1
125	Continuous Product-Focused Project Monitoring with Trend Patterns and GQM. , 2014, , .		1
126	Semi-automatic Incompatibility Localization for Re-engineered Industrial Software. , 2014, , .		1

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127	Improving writer's workshop by introducing checklist and perspectives. , 2015, , .		1
128	Iterative process to improve GQM models with metrics thresholds to detect high-risk files. , 2016, , .		1
129	Empirical Study on Specification Metrics to Predict Volatility and Software Defects. , 2018, , .		1
130	Improving GQM+Strategies with Balanced Scorecard's Perspectives: A Feasibility Study. , 2018, , .		1
131	Using Security Patterns to Develop Secure Systemsâ€"Ten Years Later. International Journal of Systems and Software Security and Protection, 2018, 9, 46-57.	0.3	1
132	Characteristics of Unmaintainable Source Code in Software Development by Multiple Organizations. , 2018, , .		1
133	Metrics Driven Architectural Analysis using Dependency Graphs for C Language Projects. , 2019, , .		1
134	Mob Programming: A Systematic Literature Review. , 2019, , .		1
135	Reduce Test Cost by Reusing Test Oracles through Combinatorial Join. , 2019, , .		1
136	A System for Seamless Support from Security Requirements Analysis to Security Design Using a Software Security Knowledge Base. , 2019, , .		1
137	Categorizing and Visualizing Issue Tickets to Better Understand the Features Implemented in Existing Software Systems. , 2019, , .		1
138	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
139	Using an Automatic Collection Method to Identify Patterns during Design Activity. Communications in Computer and Information Science, 2014, , 491-504.	0.5	1
140	Recovering Transitive Traceability Links among Various Software Artifacts for Developers. IEICE Transactions on Information and Systems, 2019, E102.D, 1750-1760.	0.7	1
141	Evaluating Structural Validity of Class Diagrams by Measuring the Number of Highly Responsible Classes. , 2014, , .		1
142	Quality Evaluation of Embedded Software in Robot Software Design Contest. Progress in Informatics, 2007, , 63.	0.2	1
143	Experimental Evaluation of HoRIM to Improve Business Strategy Models. Studies in Computational Intelligence, 2018, , 43-56.	0.9	1
144	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

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145	Feature Extraction Method for Cross-Architecture Binary Vulnerability Detection. , 2021, , .		1
146	Framework and Value-Driven Process of Software Engineering for Business and Society (SE4BS). , 2020, , .		1
147	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
148	Retrieving Software Components Using Directed Replaceability Distance. Lecture Notes in Computer Science, 2001, , 153-162.	1.3	0
149	A search system for java programs by using extracted javaBeans components. , 2004, , .		0
150	Partial and On-Demand Incremental Deployment of Java Application Program over the Internet. , 2006, , .		0
151	A metric for measuring the abstraction level of design patterns. , 2007, , .		0
152			

#	ARTICLE	IF	CITATIONS
163	Learning Effects in Programming Learning Using Python and Raspberry Pi: Case Study with Elementary School Students. , 2019, , .		0
164	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
165	The Proposal of Model Transformation Support Method Based on Model Editing Operation History. , 2019, , .		0
166	Work-in-Progress: Analysis of the use of Mentoring with Online Mob Programming. , 2021, , .		0
167	Automated Educational Program Mapping on Learning Standards in Computer Science. , 2021, , .		0
168	Comparing Participantsâ€™ Brainwaves During Solo, Pair, and Mob Programming. Lecture Notes in Business Information Processing, 2021, , 200-209.	1.0	0
169	A pattern for reconstructing test code based on test coverage. , 2010, , .		0
170	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
171	Finding and Emulating Keyboard, Mouse, and Touch Interactions and Gestures while Crawling RIAâ€™s. , 2015, , .		0
172	Generating Linear Temporal Logics Based on Property Specification Templates. Studies in Computational Intelligence, 2020, , 1-15.	0.9	0
173	Deep Cross-Project Software Reliability Growth Model Using Project Similarity-Based Clustering. Mathematics, 2021, 9, 2945.	2.2	0
174	Automated Tool for Revising Masking MC/DC Test Suite. , 2020, , .		0
175	The Competency-based Computing Curricula 2020 and SFIA V7 comparison focusing on Digital Transformation Age. , 2022, , .		0
176	WOJR: A Recommendation System for Providing Similar Problems to Programming Assignments. Applied System Innovation, 2022, 5, 53.	4.6	0