Tomas Cerny

List of Publications by Year
in descending order

89	760	686830 13	642321 23
papers	citations	h-index	g-index

91	91	91	442
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Systematic Review of Authentication and Authorization Advancements for the Internet of Things. Sensors, 2022, 22, 1361.	2.1	14
2	Advancing Static Code Analysis With Language-Agnostic Component Identification. IEEE Access, 2022, 10, 30743-30761.	2.6	12
3	Reconstructing the Holistic Architecture of Microservice Systems using Static Analysis. , 2022, , .		7
4	Selected Code-Quality Characteristics and Metrics for Internet of Things Systems. IEEE Access, 2022, 10, 46144-46161.	2.6	2
5	Semantic Code Clone Detection Method for Distributed Enterprise Systems. , 2022, , .		2
6	Code Smell Prioritization with Business Process Mining and Static Code Analysis: A Case Study. Electronics (Switzerland), 2022, 11, 1880.	1.8	4
7	Online Energy Scheduling Policies in Energy Harvesting Enabled D2D Communications. IEEE Transactions on Industrial Informatics, 2021, 17, 5678-5687.	7.2	10
8	Database-Conscious End-to-End Testing for Reactive Systems using Containerization. , 2021, , .		1
9	Automated Microservice Code-Smell Detection. Lecture Notes in Electrical Engineering, 2021, , 211-221.	0.3	3
10	On automated RBAC assessment by constructing a centralized perspective for microservice mesh. PeerJ Computer Science, 2021, 7, e376.	2.7	4
11	On Microservice Analysis and Architecture Evolution: A Systematic Mapping Study. Applied Sciences (Switzerland), 2021, 11, 7856.	1.3	21
12	Using Static Analysis to Address Microservice Architecture Reconstruction. , 2021, , .		8
13	Securing Internet of Things Devices Using The Network Context. IEEE Transactions on Industrial Informatics, 2020, 16, 4017-4027.	7.2	7
14	Automated Code-Smell Detection in Microservices Through Static Analysis: A Case Study. Applied Sciences (Switzerland), 2020, 10, 7800.	1.3	22
15	On Code Analysis Opportunities and Challenges for Enterprise Systems and Microservices. IEEE Access, 2020, 8, 159449-159470.	2.6	17
16	On Automated Role-Based Access Control Assessment in Enterprise Systems. Lecture Notes in Electrical Engineering, 2020, , 375-385.	0.3	5
17	On Limitations of Modern Static Analysis Tools. Lecture Notes in Electrical Engineering, 2020, , 577-586.	0.3	1
18	On cloud computing infrastructure for existing code-clone detection algorithms. ACM SIGAPP Applied Computing Review: A Publication of the Special Interest Group on Applied Computing, 2020, 20, 5-14.	0.5	6

#	Article	IF	Citations
19	On Vulnerability and Security Log analysis. , 2020, , .		19
20	Mapping Study on Constraint Consistency Checking in Distributed Enterprise Systems. , 2020, , .		3
21	On Matching Log Analysis to Source Code. , 2020, , .		6
22	Failure Prediction by Utilizing Log Analysis. , 2020, , .		12
23	Testing the consistency of business data objects using extended static testing of CRUD matrices. Cluster Computing, 2019, 22, 963-976.	3.5	2
24	On Relating Code Smells to Security Vulnerabilities. , 2019, , .		9
25	Case study on data communication in microservice architecture. , 2019, , .		10
26	Aspects of Quality in Internet of Things (IoT) Solutions: A Systematic Mapping Study. IEEE Access, 2019, 7, 13758-13780.	2.6	41
27	Aspect-oriented challenges in system integration with microservices, SOA and IoT. Enterprise Information Systems, 2019, 13, 467-489.	3.3	22
28	Internet of Things: Current Challenges in the Quality Assurance and Testing Methods. Lecture Notes in Electrical Engineering, 2019, , 625-634.	0.3	14
29	Survey on Compromise-Defensive System Design. Lecture Notes in Electrical Engineering, 2019, , 513-521.	0.3	0
30	Degree of Similarity of Root Trees. Lecture Notes in Electrical Engineering, 2019, , 581-591.	0.3	0
31	Intelligent token-based code clone detection system for large scale source code. , 2019, , .		1
32	Contextual understanding of microservice architecture. ACM SIGAPP Applied Computing Review: A Publication of the Special Interest Group on Applied Computing, 2018, 17, 29-45.	0.5	133
33	Pattern Matching Based Sensor Identification Layer for an Android Platform. Wireless Communications and Mobile Computing, 2018, 2018, 1-11.	0.8	4
34	Aspect oriented context-aware and event-driven data processing for internet of things. , 2018, , .		0
35	Second Screen Engagement of Event Spectators. Advances in Human-Computer Interaction, 2018, 2018, 1-20.	1.8	1
36	On isolation-driven automated module decomposition. , 2018, , .		0

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37	Survey of Authentication and Authorization for the Internet of Things. Security and Communication Networks, 2018, 2018, 1-17.	1.0	48
38	Automated extraction of business documentation in enterprise information systems. ACM SIGAPP Applied Computing Review: A Publication of the Special Interest Group on Applied Computing, 2017, 16, 5-13.	0.5	3
39	Separation of concerns for distributed cross-platform context-aware user interfaces. Cluster Computing, 2017, 20, 2355-2362.	3.5	6
40	Context-Aware Security Using Internet of Things Devices. Lecture Notes in Electrical Engineering, 2017, , 706-713.	0.3	0
41	Disambiguation and Comparison of SOA, Microservices and Self-Contained Systems. , 2017, , .		28
42	Aspect-driven Context-aware Services. , 2017, , .		2
43	Automated User Interface Generation Involving Field Classification. Software Networking, 2017, 2017, 53-78.	0.6	1
44	Prioritized Process Test: More Efficiency in Testing of Business Processes and Workflows. Lecture Notes in Electrical Engineering, 2017, , 585-593.	0.3	12
45	Static Testing Using Different Types of CRUD Matrices. Lecture Notes in Electrical Engineering, 2017, , 594-602.	0.3	0
46	Authentication and Authorization Rules Sharing for Internet of Things. Software Networking, 2016, 2017, 35-52.	0.6	3
47	Towards Shared Security through Distributed Separation of Concerns. , 2016, , .		2
48	Business Documentation Derivation from Aspect-driven Enterprise Information Systems. , 2016, , .		0
49	Adaptive Application Structure Design for Java EE Applications. , 2016, , .		1
50	On security level usage in context-aware role-based access control. , 2016, , .		17
51	On energy impact of web user interface approaches. Cluster Computing, 2016, 19, 1853-1863.	3.5	5
52	Identity Management of Devices in Internet of Things Environment. , 2016, , .		15
53	AOP-Based Approach for Local Data Management in Adaptive Interfaces. , 2016, , .		1
54	Aspect-Oriented User Interfaces Design Integration to Angular 2 Framework. , 2016, , .		0

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55	Context-Aware User Interface Field Classification. , 2016, , .		0
56	Distributed Multi-Platform Context-Aware User Interface for Information Systems. , 2016, , .		1
57	Energy Impact of Web User Interface Technology on Mobile Devices. , 2016, , .		0
58	On Metadata Extension to Derive Data Presentations with Angular 2. , 2016, , .		0
59	Survey on Second Screen Systems. , 2016, , .		0
60	Welcome Message from our General Chairs. , 2016, , .		0
61	Survey on Concern Separation in Service Integration. Lecture Notes in Computer Science, 2016, , 518-531.	1.0	5
62	Aspect, Rich, and Anemic Domain Models in Enterprise Information Systems. Lecture Notes in Computer Science, 2016, , 445-456.	1.0	2
63	Automated Business Rules Transformation into a Persistence Layer. Procedia Computer Science, 2015, 62, 312-318.	1.2	13
64	Evaluation of approaches to business rules maintenance in enterprise information systems. , 2015, , .		4
65	On web services UI in user interface generation in standalone applications. , 2015, , .		2
66	On separation of platform-independent particles in user interfaces. Cluster Computing, 2015, 18, 1215-1228.	3.5	20
67	Enterprise information systems. , 2015, , .		1
68	Impact of Remote User Interface Design and Delivery on Energy Demand. , 2015, , .		2
69	On Aspect-Oriented Programming in Adaptive User Interfaces. , 2015, , .		3
70	Effective manycast messaging for Kademlia network. , 2015, , .		1
71	Context-aware Role-based Access Control Using Security Levels. , 2015, , .		2
72	Evaluation of Separated Concerns in Web-based Delivery of User Interfaces. Lecture Notes in Electrical Engineering, 2015, , 933-940.	0.3	4

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73	Separating out Platform-independent Particles of User Interfaces. Lecture Notes in Electrical Engineering, 2015, , 941-948.	0.3	3
74	On distributed concern delivery in user interface design. Computer Science and Information Systems, 2015, 12, 655-681.	0.7	14
75	Aspect-Driven Design of Information Systems. Lecture Notes in Computer Science, 2014, , 174-186.	1.0	13
76	Context-sensitive, cross-platform user interface generation. Journal on Multimodal User Interfaces, 2014, 8, 217-229.	2.0	22
77	Efficient Description and Cache Performance in Aspect-Oriented User Interface Design. , 2014, , .		5
78	Towards effective adaptive user interfaces design. , 2013, , .		9
79	Aspect-driven, data-reflective and context-aware user interfaces design. ACM SIGAPP Applied Computing Review: A Publication of the Special Interest Group on Applied Computing, 2013, 13, 53-66.	0.5	24
80	Platform-Aware Rich-Form Generation for Adaptive Systems through Code-Inspection. Lecture Notes in Computer Science, 2013, , 768-784.	1.0	4
81	ELISA: Extensible Layer for Internet Services and Applications. , 2013, , 309-321.		0
82	Impact of user interface generation on maintenance. , 2012, , .		2
83	Towards Smart User Interface Design. , 2012, , .		6
84	Towards a Smart, Self-scaling Cooperative Web Cache. Lecture Notes in Computer Science, 2012, , 443-455.	1.0	4
85	UML-based enhanced rich form generation. , 2011, , .		5
86	How to reduce costs of business logic maintenance. , 2011, , .		12
87	SScAC: Towards a Framework for Small-Scale Software Architectures Comparison. Lecture Notes in Computer Science, 2011, , 482-493.	1.0	1
88	MetaMorPic: Self-Contained Photo Archival and Presentation. , 2011, , 149-158.		1
89	A Profile Approach to Using UML Models for Rich Form Generation. , 2010, , .		7