

# Tomas Cerny

## List of Publications by Year in descending order

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Version: 2024-02-01

89  
papers

760  
citations

686830

13  
h-index

642321

23  
g-index

91  
all docs

91  
docs citations

91  
times ranked

442  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Survey of Authentication and Authorization for the Internet of Things. Security and Communication Networks, 2018, 2018, 1-17.	1.0	48
3	Aspects of Quality in Internet of Things (IoT) Solutions: A Systematic Mapping Study. IEEE Access, 2019, 7, 13758-13780.	2.6	41
4	Disambiguation and Comparison of SOA, Microservices and Self-Contained Systems. , 2017, , .		28
5	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
6	Context-sensitive, cross-platform user interface generation. Journal on Multimodal User Interfaces, 2014, 8, 217-229.	2.0	22
7	Aspect-oriented challenges in system integration with microservices, SOA and IoT. Enterprise Information Systems, 2019, 13, 467-489.	3.3	22
8	Automated Code-Smell Detection in Microservices Through Static Analysis: A Case Study. Applied Sciences (Switzerland), 2020, 10, 7800.	1.3	22
9	On Microservice Analysis and Architecture Evolution: A Systematic Mapping Study. Applied Sciences (Switzerland), 2021, 11, 7856.	1.3	21
10	On separation of platform-independent particles in user interfaces. Cluster Computing, 2015, 18, 1215-1228.	3.5	20
11	On Vulnerability and Security Log analysis. , 2020, , .		19
12	On security level usage in context-aware role-based access control. , 2016, , .		17
13	On Code Analysis Opportunities and Challenges for Enterprise Systems and Microservices. IEEE Access, 2020, 8, 159449-159470.	2.6	17
14	Identity Management of Devices in Internet of Things Environment. , 2016, , .		15
15	Internet of Things: Current Challenges in the Quality Assurance and Testing Methods. Lecture Notes in Electrical Engineering, 2019, , 625-634.	0.3	14
16	On distributed concern delivery in user interface design. Computer Science and Information Systems, 2015, 12, 655-681.	0.7	14
17	Systematic Review of Authentication and Authorization Advancements for the Internet of Things. Sensors, 2022, 22, 1361.	2.1	14
18	Aspect-Driven Design of Information Systems. Lecture Notes in Computer Science, 2014, , 174-186.	1.0	13

#	ARTICLE	IF	CITATIONS
19	Automated Business Rules Transformation into a Persistence Layer. <i>Procedia Computer Science</i> , 2015, 62, 312-318.	1.2	13
20	How to reduce costs of business logic maintenance. , 2011, , .		12
21	Prioritized Process Test: More Efficiency in Testing of Business Processes and Workflows. <i>Lecture Notes in Electrical Engineering</i> , 2017, , 585-593.	0.3	12
22	Failure Prediction by Utilizing Log Analysis. , 2020, , .		12
23	Advancing Static Code Analysis With Language-Agnostic Component Identification. <i>IEEE Access</i> , 2022, 10, 30743-30761.	2.6	12
24	Case study on data communication in microservice architecture. , 2019, , .		10
25	Online Energy Scheduling Policies in Energy Harvesting Enabled D2D Communications. <i>IEEE Transactions on Industrial Informatics</i> , 2021, 17, 5678-5687.	7.2	10
26	Towards effective adaptive user interfaces design. , 2013, , .		9
27	On Relating Code Smells to Security Vulnerabilities. , 2019, , .		9
28	Using Static Analysis to Address Microservice Architecture Reconstruction. , 2021, , .		8
29	A Profile Approach to Using UML Models for Rich Form Generation. , 2010, , .		7
30	Securing Internet of Things Devices Using The Network Context. <i>IEEE Transactions on Industrial Informatics</i> , 2020, 16, 4017-4027.	7.2	7
31	Reconstructing the Holistic Architecture of Microservice Systems using Static Analysis. , 2022, , .		7
32	Towards Smart User Interface Design. , 2012, , .		6
33	Separation of concerns for distributed cross-platform context-aware user interfaces. <i>Cluster Computing</i> , 2017, 20, 2355-2362.	3.5	6
34	On cloud computing infrastructure for existing code-clone detection algorithms. <i>ACM SIGAPP Applied Computing Review: A Publication of the Special Interest Group on Applied Computing</i> , 2020, 20, 5-14.	0.5	6
35	On Matching Log Analysis to Source Code. , 2020, , .		6
36	UML-based enhanced rich form generation. , 2011, , .		5

#	ARTICLE	IF	CITATIONS
37	Efficient Description and Cache Performance in Aspect-Oriented User Interface Design. , 2014, , .		5
38	On energy impact of web user interface approaches. Cluster Computing, 2016, 19, 1853-1863.	3.5	5
39	Survey on Concern Separation in Service Integration. Lecture Notes in Computer Science, 2016, , 518-531.	1.0	5
40	On Automated Role-Based Access Control Assessment in Enterprise Systems. Lecture Notes in Electrical Engineering, 2020, , 375-385.	0.3	5
41	Evaluation of approaches to business rules maintenance in enterprise information systems. , 2015, , .		4
42	Pattern Matching Based Sensor Identification Layer for an Android Platform. Wireless Communications and Mobile Computing, 2018, 2018, 1-11.	0.8	4
43	On automated RBAC assessment by constructing a centralized perspective for microservice mesh. PeerJ Computer Science, 2021, 7, e376.	2.7	4
44	Towards a Smart, Self-scaling Cooperative Web Cache. Lecture Notes in Computer Science, 2012, , 443-455.	1.0	4
45	Platform-Aware Rich-Form Generation for Adaptive Systems through Code-Inspection. Lecture Notes in Computer Science, 2013, , 768-784.	1.0	4
46	Evaluation of Separated Concerns in Web-based Delivery of User Interfaces. Lecture Notes in Electrical Engineering, 2015, , 933-940.	0.3	4
47	Code Smell Prioritization with Business Process Mining and Static Code Analysis: A Case Study. Electronics (Switzerland), 2022, 11, 1880.	1.8	4
48	On Aspect-Oriented Programming in Adaptive User Interfaces. , 2015, , .		3
49	Authentication and Authorization Rules Sharing for Internet of Things. Software Networking, 2016, 2017, 35-52.	0.6	3
50	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
51	Automated Microservice Code-Smell Detection. Lecture Notes in Electrical Engineering, 2021, , 211-221.	0.3	3
52	Separating out Platform-independent Particles of User Interfaces. Lecture Notes in Electrical Engineering, 2015, , 941-948.	0.3	3
53	Mapping Study on Constraint Consistency Checking in Distributed Enterprise Systems. , 2020, , .		3
54	Impact of user interface generation on maintenance. , 2012, , .		2

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55	On web services UI in user interface generation in standalone applications. , 2015, , .		2
56	Impact of Remote User Interface Design and Delivery on Energy Demand. , 2015, , .		2
57	Context-aware Role-based Access Control Using Security Levels. , 2015, , .		2
58	Towards Shared Security through Distributed Separation of Concerns. , 2016, , .		2
59	Aspect-driven Context-aware Services. , 2017, , .		2
60	Testing the consistency of business data objects using extended static testing of CRUD matrices. Cluster Computing, 2019, 22, 963-976.	3.5	2
61	Aspect, Rich, and Anemic Domain Models in Enterprise Information Systems. Lecture Notes in Computer Science, 2016, , 445-456.	1.0	2
62	Selected Code-Quality Characteristics and Metrics for Internet of Things Systems. IEEE Access, 2022, 10, 46144-46161.	2.6	2
63	Semantic Code Clone Detection Method for Distributed Enterprise Systems. , 2022, , .		2
64	Enterprise information systems. , 2015, , .		1
65	Effective manycast messaging for Kademlia network. , 2015, , .		1
66	Adaptive Application Structure Design for Java EE Applications. , 2016, , .		1
67	AOP-Based Approach for Local Data Management in Adaptive Interfaces. , 2016, , .		1
68	Distributed Multi-Platform Context-Aware User Interface for Information Systems. , 2016, , .		1
69	Automated User Interface Generation Involving Field Classification. Software Networking, 2017, 2017, 53-78.	0.6	1
70	Second Screen Engagement of Event Spectators. Advances in Human-Computer Interaction, 2018, 2018, 1-20.	1.8	1
71	Database-Conscious End-to-End Testing for Reactive Systems using Containerization. , 2021, , .		1
72	On Limitations of Modern Static Analysis Tools. Lecture Notes in Electrical Engineering, 2020, , 577-586.	0.3	1

#	ARTICLE	IF	CITATIONS
73	SScAC: Towards a Framework for Small-Scale Software Architectures Comparison. Lecture Notes in Computer Science, 2011, , 482-493.	1.0	1
74	MetaMorPic: Self-Contained Photo Archival and Presentation. , 2011, , 149-158.		1
75	Intelligent token-based code clone detection system for large scale source code. , 2019, , .		1
76	Business Documentation Derivation from Aspect-driven Enterprise Information Systems. , 2016, , .		0
77	Aspect-Oriented User Interfaces Design Integration to Angular 2 Framework. , 2016, , .		0
78	Context-Aware User Interface Field Classification. , 2016, , .		0
79	Energy Impact of Web User Interface Technology on Mobile Devices. , 2016, , .		0
80	On Metadata Extension to Derive Data Presentations with Angular 2. , 2016, , .		0
81	Survey on Second Screen Systems. , 2016, , .		0
82	Welcome Message from our General Chairs. , 2016, , .		0
83	Context-Aware Security Using Internet of Things Devices. Lecture Notes in Electrical Engineering, 2017, , 706-713.	0.3	0
84	Aspect oriented context-aware and event-driven data processing for internet of things. , 2018, , .		0
85	On isolation-driven automated module decomposition. , 2018, , .		0
86	ELISA: Extensible Layer for Internet Services and Applications. , 2013, , 309-321.		0
87	Static Testing Using Different Types of CRUD Matrices. Lecture Notes in Electrical Engineering, 2017, , 594-602.	0.3	0
88	Survey on Compromise-Defensive System Design. Lecture Notes in Electrical Engineering, 2019, , 513-521.	0.3	0
89	Degree of Similarity of Root Trees. Lecture Notes in Electrical Engineering, 2019, , 581-591.	0.3	0