Andrea Ceccarelli

List of Publications by Year
in descending order

79 papers	616 citations	758635 12 h-index	887659 17 g-index
83 all docs	83 docs citations	83 times ranked	382 citing authors

#	Article	IF	Citations
1	A New Approach and a Related Tool for Dependability Measurements on Distributed Systems. IEEE Transactions on Instrumentation and Measurement, 2010, 59, 820-831.	2.4	30
2	Foundations of Measurement Theory Applied to the Evaluation of Dependability Attributes. , 2007, , .		25
3	Continuous and Transparent User Identity Verification for Secure Internet Services. IEEE Transactions on Dependable and Secure Computing, 2015, 12, 270-283.	3.7	25
4	Systemsâ€ofâ€systems modeling using a comprehensive viewpointâ€based SysML profile. Journal of Software: Evolution and Process, 2018, 30, e1878.	1.2	25
5	Experimental assessment of low-cost GPS-based localization in railway worksite-like scenarios. Measurement: Journal of the International Measurement Confederation, 2013, 46, 456-466.	2.5	24
6	Unsupervised Algorithms to Detect Zero-Day Attacks: Strategy and Application. IEEE Access, 2021, 9, 90603-90615.	2.6	23
7	Safe estimation of time uncertainty of local clocks. , 2009, , .		22
8	MADneSs: A Multi-Layer Anomaly Detection Framework for Complex Dynamic Systems. IEEE Transactions on Dependable and Secure Computing, 2021, 18, 796-809.	3.7	19
9	Unsupervised Anomaly Detectors to Detect Intrusions in the Current Threat Landscape. ACM/IMS Transactions on Data Science, 2021, 2, 1-26.	2.1	19
10	Assuring Resilient Time Synchronization. , 2008, , .		18
11	Insider Threat Assessment. Operating Systems Review (ACM), 2014, 48, 3-12.	1.5	18
12	Prepare for trouble and make it double! Supervised â€" Unsupervised stacking for anomaly-based intrusion detection. Journal of Network and Computer Applications, 2021, 189, 103106.	5.8	16
13	Basic Concepts on Systems of Systems. Lecture Notes in Computer Science, 2016, , 1-39.	1.0	14
14	Threat Analysis in Systems-of-Systems. ACM Transactions on Cyber-Physical Systems, 2019, 3, 1-24.	1.9	14
15	Towards a collaborative framework to improve urban grid resilience. , 2016, , .		13
16	Evaluation of Anomaly Detection Algorithms Made Easy with RELOAD. , 2019, , .		13
17	FUSIONâ€"Fog Computing and Blockchain for Trusted Industrial Internet of Things. IEEE Transactions on Engineering Management, 2020, , 1-15.	2.4	12
18	On the educated selection of unsupervised algorithms via attacks and anomaly classes. Journal of Information Security and Applications, 2020, 52, 102474.	1.8	12

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19	Design and Implementation of Real-Time Wearable Devices for a Safety-Critical Track Warning System. , 2012, , .		11
20	A Holistic Viewpoint-Based SysML Profile to Design Systems-of-Systems. , 2016, , .		11
21	ALARP (A Railway Automatic Track Warning System Based on Distributed Personal Mobile Terminals). Procedia, Social and Behavioral Sciences, 2012, 48, 2081-2090.	0.5	10
22	Resilient estimation of synchronisation uncertainty through software clocks. International Journal of Critical Computer-Based Systems, 2013, 4, 301.	0.1	10
23	Model-based Evaluation of Scalability and Security Tradeoffs: a Case Study on a Multi-Service Platform. Electronic Notes in Theoretical Computer Science, 2015, 310, 113-133.	0.9	10
24	Experimental Validation of a Synchronization Uncertainty-Aware Software Clock. , 2010, , .		9
25	A Testing Service for Lifelong Validation of Dynamic SOA. , 2011, , .		9
26	Identification of critical situations via Event Processing and Event Trust Analysis. Knowledge and Information Systems, 2017, 52, 147-178.	2.1	9
27	Introducing Meta-Requirements for Describing System of Systems. , 2015, , .		8
28	On the impact of emergent properties on SoS security. , 2016, , .		8
29	Exploring anomaly detection in systems of systems. , 2017, , .		8
30	RGB Cameras Failures and Their Effects in Autonomous Driving Applications. IEEE Transactions on Dependable and Secure Computing, 2023, 20, 2731-2745.	3.7	8
31	System and Network Security: Anomaly Detection and Monitoring. Journal of Electrical and Computer Engineering, 2016, 2016, 1-2.	0.6	7
32	System-of-Systems to Support Mobile Safety Critical Applications: Open Challenges and Viable Solutions. IEEE Systems Journal, 2018, 12, 250-261.	2.9	7
33	A Service Discovery Approach for Testing Dynamic SOAs. , 2011, , .		6
34	Localization errors of low-cost GPS devices in railway worksite-like scenarios. , 2011, , .		6
35	Differential analysis of Operating System indicators for anomaly detection in dependable systems: An experimental study. Measurement: Journal of the International Measurement Confederation, 2016, 80, 229-240.	2.5	6
36	On Algorithms Selection for Unsupervised Anomaly Detection. , 2018, , .		6

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37	Into the Unknown: Unsupervised Machine Learning Algorithms for Anomaly-Based Intrusion Detection. , 2020, , .		6
38	A Multi-layer Anomaly Detector for Dynamic Service-Based Systems. Lecture Notes in Computer Science, 2015, , 166-180.	1.0	6
39	Context-Awareness to Improve Anomaly Detection in Dynamic Service Oriented Architectures. Lecture Notes in Computer Science, 2016, , 145-158.	1.0	6
40	A Self-Aware Clock for Pervasive Computing Systems. Parallel, Distributed and Network-based Processing, Proceedings of the Euromicro Workshop on, 2007, , .	0.0	5
41	A Resilient SIL 2 Driver Machine Interface for Train Control Systems. , 2008, , .		5
42	GPS and Electronic Fence Data Fusion for Positioning within Railway Worksite Scenarios. , 2012, , .		5
43	A methodology and supporting techniques for the quantitative assessment of insider threats. , 2013, , .		5
44	Usability Assessment in a Multi-Biometric Continuous Authentication System. , 2016, , .		5
45	Presenting the Proper Data to the Crisis Management Operator: A Relevance Labelling Strategy. , 2016, , .		5
46	Enhancing workers safety in worksites through augmented GNSS sensors. Measurement: Journal of the International Measurement Confederation, 2018, 117, 144-152.	2.5	5
47	Trustworthy Evaluation of a Safe Driver Machine Interface through Software-Implemented Fault Injection. , 2009, , .		4
48	Improving Security of Internet Services through Continuous and Transparent User Identity Verification. , 2012, , .		4
49	A Testbed for Evaluating Anomaly Detection Monitors through Fault Injection. , 2014, , .		4
50	A Hazus-Based Method for Assessing Robustness of Electricity Supply to Critical Smart Grid Consumers during Flood Events. , 2016, , .		4
51	A Model-Based Approach for Analyzing the Autonomy Levels for Cyber-Physical Systems-of-Systems. , 2018, , .		4
52	A model to discipline autonomy in cyberâ€physical systemsâ€ofâ€systems and its application. Journal of Software: Evolution and Process, 2020, 33, e2328.	1.2	4
53	Architecting and Validating Dependable Systems: Experiences and Visions. Lecture Notes in Computer Science, 2010, , 297-321.	1.0	4
54	Improving Robustness of Network Fault Diagnosis to Uncertainty in Observations. , 2010, , .		3

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55	Continuous Authentication and Non-repudiation for the Security of Critical Systems. , 2016, , .		3
56	The SAMBA Approach for Self-Adaptive Model-Based Online Testing of Services Orchestrations. , 2019, , .		3
57	Continuous User Identity Verification for Trusted Operators in Control Rooms. Lecture Notes in Computer Science, 2015, , 187-200.	1.0	3
58	Towards Making NekoStat a Proper Measurement Tool for the Validation of Distributed Systems. , 2007, , .		2
59	RACME: A Framework to Support V&#x0026;V and Certification. , 2011, , .		2
60	Experimental analysis of the first order time difference of indicators used in the monitoring of complex systems. , 2013, , .		2
61	Qualitative comparison of aerospace standards: An objective approach. , 2013, , .		2
62	A monitoring and testing framework for critical off-the-shelf applications and services. , 2013, , .		2
63	Labelling relevant events to support the crisis management operator. Journal of Software: Evolution and Process, 2018, 30, e1874.	1.2	2
64	An Experimental Framework for the Analysis and Validation of Software Clocks. Lecture Notes in Computer Science, 2009, , 69-81.	1.0	2
65	Challenging Anomaly Detection in Complex Dynamic Systems. , 2016, , .		2
66	Towards a Framework for Self-Adaptive Reliable Network Services in Highly-Uncertain Environments. , 2010, , .		1
67	Meeting the challenges in the design and evaluation of a trackside real-time safety-critical system. , 2013, , .		1
68	A Modeling Framework to Support Resilient Evolution Planning of Smart Grids. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2017, , 233-242.	0.2	1
69	Exploiting MDE for Platform-Independent Testing of Service Orchestrations. , 2019, , .		1
70	On Security Countermeasures Ranking through Threat Analysis. Lecture Notes in Computer Science, 2014, , 243-254.	1.0	1
71	On trustworthy measurements when testing dependable systems: a discussion and experiences. International Journal of Critical Computer-Based Systems, 2015, 6, 154.	0.1	0
72	Workshop on Recent Advances in the DependabIlity AssessmeNt of Complex systEms (RADIANCE). , 2015, , .		0

#	Article	IF	Citations
73	Introduction to RADIANCE 2016. , 2016, , .		0
74	Assessing the Impact of Cascading Failures in Urban Electricity Networks. , 2017, , .		0
75	RADIANCE Welcome. , 2017, , .		0
76	Analysis of Companies Gaps in the Application of Standards for Safety-Critical Software. Lecture Notes in Computer Science, 2015, , 303-313.	1.0	0
77	Time and Resilient Master Clocks in Cyber-Physical Systems. Lecture Notes in Computer Science, 2016, , 165-185.	1.0	0
78	A multi-criteria ranking of security countermeasures. , 2016, , .		0
79	Detect Adversarial Attacks Against Deep Neural Networks With GPU Monitoring. IEEE Access, 2021, 9, 150579-150591.	2.6	0