

Paulo Maciel

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9106611/publications.pdf>

Version: 2024-02-01

100
papers

1,508
citations

430874

18
h-index

501196

28
g-index

100
all docs

100
docs citations

100
times ranked

786
citing authors

#	ARTICLE	IF	CITATIONS
1	A model-based approach for planning blockchain service provisioning. Computing (Vienna/New York), 2022, 104, 315-337.	4.8	4
2	A survey on reliability and availability modeling of edge, fog, and cloud computing. Journal of Reliable Intelligent Environments, 2022, 8, 227-245.	5.2	13
3	Model-Based Performability and Dependability Evaluation of a System with VM Migration as Rejuvenation in the Presence of Bursty Workloads. Journal of Network and Systems Management, 2022, 30, 1.	4.9	3
4	Availability model for edge-fog-cloud continuum: an evaluation of an end-to-end infrastructure of intelligent traffic management service. Journal of Supercomputing, 2022, 78, 4421-4448.	3.6	16
5	Model-Driven Impact Quantification of Energy Resource Redundancy and Server Rejuvenation on the Dependability of Medical Sensor Networks in Smart Hospitals. Sensors, 2022, 22, 1595.	3.8	4
6	Performance and availability evaluation of the blockchain platform hyperledger fabric. Journal of Supercomputing, 2022, 78, 12505-12527.	3.6	6
7	Iterated local search with tabu search for the weighted vertex coloring problem. Computers and Operations Research, 2021, 125, 105087.	4.0	9
8	Distributed application provisioning over Ethereum-based private and permissioned blockchain: availability modeling, capacity, and costs planning. Journal of Supercomputing, 2021, 77, 9615-9641.	3.6	10
9	Analytical models for availability evaluation of edge and fog computing nodes. Journal of Supercomputing, 2021, 77, 9905-9933.	3.6	21
10	Building energy consumption models based on smartphone users' usage patterns. Knowledge-Based Systems, 2021, 213, 106680.	7.1	6
11	Dependability and Sustainability Evaluation of Data Center Electrical Architectures. , 2021, , .		3
12	The Mercury Environment: A Modeling Tool for Performance and Dependability Evaluation. Ambient Intelligence and Smart Environments, 2021, , .	0.3	8
13	Dependability and Sensitivity Analysis in Dense Data Center Networks. , 2021, , .		3
14	Screening hardware and volume factors in distributed machine learning algorithms on spark. Computing (Vienna/New York), 2021, 103, 2203-2225.	4.8	4
15	Dependability Impact in the Smart Solar Power Systems: An Analysis of Smart Buildings. Energies, 2021, 14, 124.	3.1	4
16	Reliability-and-Availability Sensitivity Analysis on Convergent Network Infrastructures: Methodology and Case Study. , 2021, , .		1
17	PyMTDEvaluator: A Tool for Time-Based Moving Target Defense Evaluation: Tool description paper. , 2021, , .		2
18	Models for hyper-converged cloud computing infrastructures planning. International Journal of Grid and Utility Computing, 2020, 11, 196.	0.2	6

#	ARTICLE	IF	CITATIONS
19	Bottleneck Detection in Cloud Computing Performance and Dependability: Sensitivity Rankings for Hierarchical Models. Journal of Network and Systems Management, 2020, 28, 1839-1871.	4.9	2
20	Data centersâ€™ services restoration based on the decision-making of distributed agents. Telecommunication Systems, 2020, 74, 367-378.	2.5	4
21	Availability and reliability modeling of VM migration as rejuvenation on a system under varying workload. Software Quality Journal, 2020, 28, 59-83.	2.2	12
22	Stochastic performance model for web server capacity planning in fog computing. Journal of Supercomputing, 2020, 76, 9533-9557.	3.6	21
23	Security and Availability Modeling of VM Migration as Moving Target Defense. , 2020, , .		7
24	A Model for Availability and Security Risk Evaluation for Systems With VMM Rejuvenation Enabled by VM Migration Scheduling. IEEE Access, 2019, 7, 138315-138326.	4.2	12
25	IaaS Cloud Availability Planning using Models and Genetic Algorithms. , 2019, , .		5
26	A Hierarchical Model for Virtualized Data Center Availability Evaluation. , 2019, , .		3
27	Dependability Evaluation of an IoT System: A Hierarchical Modelling Approach. , 2019, , .		11
28	A Hybrid Mechanism of Horizontal Auto-scaling Based on Thresholds and Time Series. , 2019, , .		8
29	Performability Evaluation and Optimization of Workflow Applications in Cloud Environments. Journal of Grid Computing, 2019, 17, 749-770.	3.9	13
30	Models to evaluate service Provisioning over Cloud Computing Environments - A Blockchain-As-A-Service case study. Revista De Informatica Teorica E Aplicada, 2019, 26, 65-74.	0.2	6
31	Mobile Cloud Performance Evaluation Using Stochastic Models. IEEE Transactions on Mobile Computing, 2018, 17, 1134-1147.	5.8	20
32	Software Rejuvenation in Computer Systems: An Automatic Forecasting Approach Based on Time Series. , 2018, , .		8
33	Dependability Evaluation of a Blockchain-as-a-Service Environment. , 2018, , .		13
34	Performance prediction for supporting mobile applicationsâ€™ offloading. Journal of Supercomputing, 2018, 74, 4060-4103.	3.6	9
35	Sensitivity analysis of an availability model for disaster tolerant cloud computing system. International Journal of Network Management, 2018, 28, e2040.	2.2	4
36	Models for availability and power consumption evaluation of a private cloud with VMM rejuvenation enabled by VM Live Migration. Journal of Supercomputing, 2018, 74, 4817-4841.	3.6	32

#	ARTICLE	IF	CITATIONS
37	Decision making in cloud environments: an approach based on multiple-criteria decision analysis and stochastic models. Journal of Cloud Computing: Advances, Systems and Applications, 2018, 7, .	3.9	25
38	SWARE: A Methodology for Software Aging and Rejuvenation Experiments. Journal of Information Systems Engineering and Management, 2018, 3, .	0.7	12
39	Multi-objective optimization of multimedia embedded systems using genetic algorithms and stochastic simulation. Soft Computing, 2017, 21, 4141-4158.	3.6	9
40	Cloud infrastructure planning considering different redundancy mechanisms. Computing (Vienna/New York), 2017, 99, 841-864.	4.8	11
41	Availability modeling and analysis of a disaster-recovery-as-a-service solution. Computing (Vienna/New York), 2017, 99, 841-864.	4.8	24
42	Mercury: Performance and Dependability Evaluation of Systems with Exponential, Exponential, and General Distributions. , 2017, , .		25
43	Capacity-Oriented Availability Model for Resources Estimation on Private Cloud Infrastructure. , 2017, , .		13
44	An approach to investigate aging symptoms and rejuvenation effectiveness on software systems. , 2017, , .		9
45	Impact of capacity and discharging rate on battery life time: A stochastic model to support mobile device autonomy planning. Pervasive and Mobile Computing, 2017, 39, 180-194.	3.3	7
46	Redundant Eucalyptus Private Clouds: Availability Modeling and Sensitivity Analysis. Journal of Grid Computing, 2017, 15, 1-22.	3.9	40
47	Synchronization server infrastructure: A relationship between system downtime and deployment cost. , 2017, , .		2
48	Integrated Evaluation of Reliability and Power Consumption of Wireless Sensor Networks. Sensors, 2017, 17, 2547.	3.8	14
49	Advanced Stochastic Petri Net Modeling with the Mercury Scripting Language. , 2017, , .		12
50	Availability Evaluation and Sensitivity Analysis of a Mobile Backend-as-a-Service Platform. Quality and Reliability Engineering International, 2016, 32, 2191-2205.	2.3	23
51	Hierarchical Model and Sensitivity Analysis for a Cloud-Based VoD Streaming Service. , 2016, , .		10
52	An Algorithm to Optimize Electrical Flows of Private Cloud Infrastructures. , 2015, , .		2
53	Stochastic Modeling of Auto Scaling Mechanism in Private Clouds for Supporting Performance Tuning. , 2015, , .		4
54	A Modeling Approach for Cloud Infrastructure Planning Considering Dependability and Cost Requirements. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2015, 45, 549-558.	9.3	33

#	ARTICLE	IF	CITATIONS
55	Eucalyptus-based private clouds: availability modeling and comparison to the cost of a public cloud. Computing (Vienna/New York), 2015, 97, 1121-1140.	4.8	44
56	Sensitivity analysis of a hierarchical model of mobile cloud computing. Simulation Modelling Practice and Theory, 2015, 50, 151-164.	3.8	56
57	Dependable virtual network mapping. Computing (Vienna/New York), 2015, 97, 459-481.	4.8	13
58	Reliability of Wireless Sensor Networks. Sensors, 2014, 14, 15760-15785.	3.8	80
59	An Integrated Modeling Approach to Evaluate and Optimize Data Center Sustainability, Dependability and Cost. Energies, 2014, 7, 238-277.	3.1	32
60	Eucabomber 2.0: A tool for dependability tests in eucalyptus cloud infrastructures considering VM life-cycle. , 2014, , .		3
61	Using Coloured Petri Nets for Evaluating the Power Consumption of Wireless Sensor Networks. International Journal of Distributed Sensor Networks, 2014, 10, 423537.	2.2	10
62	Software aging in the eucalyptus cloud computing infrastructure. ACM Journal on Emerging Technologies in Computing Systems, 2014, 10, 1-22.	2.3	34
63	Redundant VoD Streaming Service in a Private Cloud: Availability Modeling and Sensitivity Analysis. Mathematical Problems in Engineering, 2014, 2014, 1-14.	1.1	9
64	GeoClouds Modcs: A perfomability evaluation tool for disaster tolerant IaaS clouds. , 2014, , .		7
65	Availability Evaluation of Digital Library Cloud Services. , 2014, , .		26
66	Estimating sustainability impact of high dependable data centers: a comparative study between Brazilian and US energy mixes. Computing (Vienna/New York), 2013, 95, 1137-1170.	4.8	24
67	Availability study on cloud computing environments: Live migration as a rejuvenation mechanism. , 2013, , .		53
68	Dependability models for designing disaster tolerant cloud computing systems. , 2013, , .		24
69	An Algorithm to Optimize Electrical Flows. , 2013, , .		1
70	Comparative Analysis of Migration-Based Rejuvenation Schedules on Cloud Availability. , 2013, , .		19
71	ASTRO: An integrated environment for dependability and sustainability evaluation. Sustainable Computing: Informatics and Systems, 2013, 3, 1-17.	2.2	39
72	A Power Load Distribution Algorithm to Optimize Data Center Electrical Flow. Energies, 2013, 6, 3422-3443.	3.1	13

#	ARTICLE	IF	CITATIONS
73	Evaluating the Power Consumption of Wireless Sensor Network Applications Using Models. Sensors, 2013, 13, 3473-3500.	3.8	48
74	A simulation optimization approach for design space exploration of soft real-time embedded systems. , 2013, , .		1
75	EucaBomber: Experimental Evaluation of Availability in Eucalyptus Private Clouds. , 2013, , .		10
76	Availability and Energy Consumption Analysis of Mobile Cloud Environments. , 2013, , .		10
77	The Effects of Temperature Variation on Data Center IT Systems. , 2013, , .		6
78	OpenMADS: An Open Source Tool for Modeling and Analysis of Distributed Systems. Lecture Notes in Computer Science, 2013, , 277-284.	1.3	10
79	Experimental evaluation of software aging effects in the eucalyptus elastic block storage. , 2012, , .		10
80	Dependability assessment of virtualized networks. , 2012, , .		16
81	Models for dependability and sustainability analysis of data center cooling architectures. , 2012, , .		19
82	Calau: An environment for modeling and analyzing embedded real-time systems. , 2012, , .		2
83	Characterization of Software Aging Effects in Elastic Storage Mechanisms for Private Clouds. , 2012, , .		19
84	An availability model for eucalyptus platform: An analysis of warm-standby replication mechanism. , 2012, , .		58
85	Software aging issues on the eucalyptus cloud computing infrastructure. , 2011, , .		36
86	Software Rejuvenation in Eucalyptus Cloud Computing Infrastructure: A Method Based on Time Series Forecasting and Multiple Thresholds. , 2011, , .		32
87	Performability modeling of electronic funds transfer systems. Computing (Vienna/New York), 2011, 91, 315-334.	4.8	5
88	Experimental evaluation of software aging effects on the eucalyptus cloud computing infrastructure. , 2011, , .		38
89	Performance and energy consumption estimation for commercial off-the-shelf component system design. Innovations in Systems and Software Engineering, 2010, 6, 107-114.	2.1	6
90	Model-driven software synthesis for hard real-time applications with energy constraints. Design Automation for Embedded Systems, 2010, 14, 327-366.	1.0	9

#	ARTICLE	IF	CITATIONS
91	A COTS-based approach for estimating performance and energy consumption of embedded real-time systems. Information Processing Letters, 2010, 110, 525-534.	0.6	1
92	Quantifying the sustainability impact of data center availability. Performance Evaluation Review, 2010, 37, 64-68.	0.6	42
93	Performability evaluation of EFT systems using exponential stochastic models. , 2009, , .		3
94	Performability evaluation of EFT systems for SLA assurance. , 2009, , .		7
95	Performance modeling for evaluation and planning of Electronic Funds Transfer Systems. , 2009, , .		5
96	Performance Modeling for Evaluation and Planning of Electronic Funds Transfer Systems with Bursty Arrival Traffic. , 2009, , .		12
97	A time Petri net-based method for embedded hard real-time software synthesis. Design Automation for Embedded Systems, 2008, 12, 31-62.	1.0	4
98	Hard real-time tasks' scheduling considering voltage scaling, precedence and exclusion relations. Information Processing Letters, 2008, 108, 50-59.	0.6	14
99	Mapping UML Interaction Overview Diagram to Time Petri Net for Analysis and Verification of Embedded Real-Time Systems with Energy Constraints. , 2008, , .		9
100	Availability evaluation of system service hosted in private cloud computing through hierarchical modeling process. Journal of Supercomputing, 0, , 1.	3.6	1