Saurabh Garg

List of Publications by Year
in descending order

107 papers	4,959 citations	212478 28 h-index	139680 61 g-index
112 all docs	112 docs citations	112 times ranked	4644 citing authors

#	Article	IF	Citations
1	Scheduling Algorithms for Efficient Execution of Stream Workflow Applications in Multicloud Environments. IEEE Transactions on Services Computing, 2022, 15, 860-875.	3.2	7
2	AutoDiagn: An Automated Real-Time Diagnosis Framework for Big Data Systems. IEEE Transactions on Computers, 2022, 71, 1035-1048.	2.4	7
3	Towards Interconnected Blockchains. ACM Computing Surveys, 2022, 54, 1-39.	16.1	25
4	A context-aware information-based clone node attack detection scheme in Internet of Things. Journal of Network and Computer Applications, 2022, 197, 103271.	5.8	9
5	A probability-based risk metric for operational wildfire risk management. Environmental Modelling and Software, 2022, 148, 105286.	1.9	4
6	Towards a formal modelling, analysis and verification of a clone node attack detection scheme in the internet of things. Computer Networks, 2022, 204, 108702.	3.2	5
7	A taxonomy study on securing Blockchain-based Industrial applications: An overview, application perspectives, requirements, attacks, countermeasures, and open issues. Journal of Industrial Information Integration, 2022, 26, 100312.	4.3	20
8	Resource scheduling and provisioning for processing of dynamic stream workflows under latency constraints. Future Generation Computer Systems, 2022, 131, 166-182.	4.9	0
9	Applications of artificial intelligence to aid early detection of dementia: A scoping review on current capabilities and future directions. Journal of Biomedical Informatics, 2022, 127, 104030.	2.5	33
10	Smart-contract enabled decentralized knowledge fusion for blockchain-based conversation system. Expert Systems With Applications, 2022, 203, 117089.	4.4	4
11	A blockchain-based framework for automatic SLA management in fog computing environments. Journal of Supercomputing, 2022, 78, 16647-16677.	2.4	4
12	The TAS Test project: a prospective longitudinal validation of new online motor-cognitive tests to detect preclinical Alzheimer's disease and estimate 5-year risks of cognitive decline and dementia. BMC Neurology, 2022, 22, .	0.8	8
13	Detection of SLA Violation for Big Data Analytics Applications in Cloud. IEEE Transactions on Computers, 2021, 70, 746-758.	2.4	6
14	A study on the evaluation of HPC microservices in containerized environment. Concurrency Computation Practice and Experience, 2021, 33, 1-1.	1.4	12
15	BigDataSDNSim: A simulator for analyzing big data applications in software–defined cloud data centers. Software - Practice and Experience, 2021, 51, 893-920.	2.5	9
16	SMOaaS: a Scalable Matrix Operation as a Service model in Cloud. Journal of Supercomputing, 2021, 77, 3381-3401.	2.4	0
17	Multi-criteria--based Dynamic User Behaviour--aware Resource Allocation in Fog Computing. ACM Transactions on Internet of Things, 2021, 2, 1-31.	3.4	16
18	A Generic Stochastic Model for Resource Availability in Fog Computing Environments. IEEE Transactions on Parallel and Distributed Systems, 2021, 32, 960-974.	4.0	13

#	Article	IF	Citations
19	A Surrogate Model for Rapidly Assessing the Size of a Wildfire over Time. Fire, 2021, 4, 20.	1.2	7
20	Towards Secure Fog Computing: A Survey on Trust Management, Privacy, Authentication, Threats and Access Control. Electronics (Switzerland), 2021, 10, 1171.	1.8	30
21	A decision model for blockchain applicability into knowledge-based conversation system. Knowledge-Based Systems, 2021, 220, 106791.	4.0	21
22	Performance evaluation of Hyperledger Fabric-enabled framework for pervasive peer-to-peer energy trading in smart Cyberâ€"Physical Systems. Future Generation Computer Systems, 2021, 118, 392-416.	4.9	22
23	A formally verified blockchain-based decentralised authentication scheme for the internet of things. Journal of Supercomputing, 2021, 77, 14461-14501.	2.4	13
24	Hand tremor detection in videos with cluttered background using neural network based approaches. Health Information Science and Systems, 2021, 9, 30.	3.4	13
25	Running Industrial Workflow Applications in a Software-Defined Multicloud Environment Using Green Energy Aware Scheduling Algorithm. IEEE Transactions on Industrial Informatics, 2021, 17, 5645-5656.	7.2	24
26	Online Scheduling Technique To Handle Data Velocity Changes in Stream Workflows. IEEE Transactions on Parallel and Distributed Systems, 2021, 32, 2115-2130.	4.0	5
27	Global sensitivity analysis for uncertainty quantification in fire spread models. Environmental Modelling and Software, 2021, 143, 105110.	1.9	8
28	SLA Management for Big Data Analytical Applications in Clouds. ACM Computing Surveys, 2021, 53, 1-40.	16.1	18
29	Automatic construction of accurate bioacoustics workflows under time constraints using a surrogate model. Applied Soft Computing Journal, 2021, 113, 107944.	4.1	1
30	Mobility-Based Resource Allocation and Provisioning in Fog and Edge Computing Paradigms: Review, Challenges, and Future Directions. , 2021, , 251-279.		3
31	SDP: Scalable Real-time Dynamic Graph Partitioner. IEEE Transactions on Services Computing, 2021, , 1-1.	3.2	1
32	Orchestrating Big Data Analysis Workflows in the Cloud. ACM Computing Surveys, 2020, 52, 1-41.	16.1	35
33	Deadline-based dynamic resource allocation and provisioning algorithms in Fog-Cloud environment. Future Generation Computer Systems, 2020, 104, 131-141.	4.9	118
34	IoTSimâ€"Edge: A simulation framework for modeling the behavior of Internet of Things and edge computing environments. Software - Practice and Experience, 2020, 50, 844-867.	2.5	69
35	An Efficient Resource Monitoring Service for Fog Computing Environments. IEEE Transactions on Services Computing, 2020, 13, 709-722.	3.2	29
36	FogAuthChain: A secure location-based authentication scheme in fog computing environments using Blockchain. Computer Communications, 2020, 162, 212-224.	3.1	44

#	ARTICLE	IF	CITATIONS
37	An efficient framework for ensemble of natural disaster simulations as a service. Geoscience Frontiers, 2020, 11, 1859-1873.	4.3	8
38	Repetitive transcranial magnetic stimulation improves Parkinson's freezing of gait via normalizing brain connectivity. Npj Parkinson's Disease, 2020, 6, 16.	2.5	31
39	A cloud-based framework for sensitivity analysis of natural hazard models. Environmental Modelling and Software, 2020, 134, 104800.	1.9	13
40	Cost effective stream workflow scheduling to handle application structural changes. Future Generation Computer Systems, 2020, 112, 348-361.	4.9	8
41	IoTSim-SDWAN: A simulation framework for interconnecting distributed datacenters over Software-Defined Wide Area Network (SD-WAN). Journal of Parallel and Distributed Computing, 2020, 143, 17-35.	2.7	13
42	AcoustiCloud: A cloud-based system for managing large-scale bioacoustics processing. Environmental Modelling and Software, 2020, 131, 104778.	1.9	5
43	Bioacoustics Data Analysis – A Taxonomy, Survey and Open Challenges. IEEE Access, 2020, 8, 57684-57708.	2.6	20
44	An automated model to score the privacy of unstructured information—Social media case. Computers and Security, 2020, 92, 101778.	4.0	11
45	A Micro-Level Compensation-Based Cost Model for Resource Allocation in a Fog Environment. Sensors, 2019, 19, 2954.	2.1	24
46	High-frequency rTMS over the supplementary motor area improves freezing of gait in Parkinson's disease: a randomized controlled trial. Parkinsonism and Related Disorders, 2019, 68, 85-90.	1.1	39
47	Cloud Computing in natural hazard modeling systems: Current research trends and future directions. International Journal of Disaster Risk Reduction, 2019, 38, 101188.	1.8	37
48	Automatic rain and cicada chorus filtering of bird acoustic data. Applied Soft Computing Journal, 2019, 81, 105501.	4.1	24
49	A Survey on Blockchain-Based Internet Service Architecture: Requirements, Challenges, Trends, and Future. IEEE Access, 2019, 7, 75845-75872.	2.6	85
50	Sustainability Analysis for Fog Nodes With Renewable Energy Supplies. IEEE Internet of Things Journal, 2019, 6, 6725-6735.	5.5	5
51	IoTSim-Stream: Modelling stream graph application in cloud simulation. Future Generation Computer Systems, 2019, 99, 86-105.	4.9	14
52	Window-based Streaming Graph Partitioning Algorithm. , 2019, , .		13
53	Identifying Patterns of Human and Bird Activities Using Bioacoustic Data. Forests, 2019, 10, 917.	0.9	0
54	Co-authorship trends in English literary studies, 1995–2015. Studies in Higher Education, 2019, 44, 786-798.	2.9	5

#	Article	IF	Citations
55	Renewable Energy-Based Multi-Indexed Job Classification and Container Management Scheme for Sustainability of Cloud Data Centers. IEEE Transactions on Industrial Informatics, 2019, 15, 2947-2957.	7.2	85
56	Privacy-aware smart city: A case study in collaborative filtering recommender systems. Journal of Parallel and Distributed Computing, 2019, 127, 145-159.	2.7	32
57	User's privacy in recommendation systems applying online social network data: a survey and taxonomy. , 2019, , 259-282.		7
58	Orchestration Tools for Big Data. , 2019, , 1231-1239.		0
59	Automatic and Efficient Denoising of Bioacoustics Recordings Using MMSE STSA. IEEE Access, 2018, 6, 5010-5022.	2.6	19
60	Cloud computing based bushfire prediction for cyber–physical emergency applications. Future Generation Computer Systems, 2018, 79, 354-363.	4.9	15
61	Cost efficient scheduling of MapReduce applications on public clouds. Journal of Computational Science, 2018, 26, 375-388.	1.5	16
62	A Privacy-Enhanced Friending Approach for Users on Multiple Online Social Networks. Computers, 2018, 7, 42.	2.1	7
63	Investigation of Unsupervised Models for Biodiversity Assessment. Lecture Notes in Computer Science, 2018, , 160-171.	1.0	2
64	Scalable preprocessing of high volume environmental acoustic data for bioacoustic monitoring. PLoS ONE, 2018, 13, e0201542.	1.1	4
65	A Holistic Evaluation of Docker Containers for Interfering Microservices. , 2018, , .		25
66	Blockchain: Trends and Future. Lecture Notes in Computer Science, 2018, , 201-210.	1.0	25
67	SparkCloud: A Cloud-Based Elastic Bushfire Simulation Service. Remote Sensing, 2018, 10, 74.	1.8	5
68	Fog Computing: Survey of Trends, Architectures, Requirements, and Research Directions. IEEE Access, 2018, 6, 47980-48009.	2.6	366
69	The Next Grand Challenges: Integrating the Internet of Things and Data Science. IEEE Cloud Computing, 2018, 5, 12-26.	5.3	74
70	IOTSim: A simulator for analysing IoT applications. Journal of Systems Architecture, 2017, 72, 93-107.	2.5	159
71	Programming SDN-Native Big Data Applications: Research Gap Analysis. IEEE Cloud Computing, 2017, 4, 62-71.	5.3	8
72	Scoring Users' Privacy Disclosure Across Multiple Online Social Networks. IEEE Access, 2017, 5, 13118-13130.	2.6	68

#	Article	IF	Citations
73	Orchestrating BigData Analysis Workflows. IEEE Cloud Computing, 2017, 4, 20-28.	5.3	34
74	B2P2: A Scalable Big Bioacoustic Processing Platform. , 2016, , .		3
75	SLA-Aware Scheduling of Map-Reduce Applications on Public Clouds. , 2016, , .		5
76	Exploring the Use of Big Data Analytics for Improving Support to Students in Higher Education. Lecture Notes in Computer Science, 2016, , 702-707.	1.0	1
77	Service Level Agreement(SLA) Based SaaS Cloud Management System. , 2015, , .		7
78	Clouds selection for network appliances based on trust credibility. , 2015, , .		1
79	CloudPick: a framework for QoSâ€aware and ontologyâ€based service deployment across clouds. Software - Practice and Experience, 2015, 45, 197-231.	2.5	29
80	Cross-Layer SLA Management for Cloud-hosted Big Data Analytics Applications. , 2015, , .		4
81	Performance Analysis of Scheduling Algorithms for Dynamic Workflow Applications. , 2015, , .		6
82	WGS Analysis and Interpretation in Clinical and Public Health Microbiology Laboratories: What Are the Requirements and How Do Existing Tools Compare?. Pathogens, 2014, 3, 437-458.	1.2	50
83	SLA-Based Resource Provisioning for Hosted Software-as-a-Service Applications in Cloud Computing Environments. IEEE Transactions on Services Computing, 2014, 7, 465-485.	3.2	100
84	SLA-based virtual machine management for heterogeneous workloads in a cloud datacenter. Journal of Network and Computer Applications, 2014, 45, 108-120.	5.8	187
85	Particle swarm optimization of a neural network model in a machining process. Sadhana - Academy Proceedings in Engineering Sciences, 2014, 39, 533-548.	0.8	23
86	Robust Scheduling of Scientific Workflows with Deadline and Budget Constraints in Clouds. , 2014, , .		99
87	Energy and Carbon-Efficient Placement of Virtual Machines in Distributed Cloud DataÂCenters. Lecture Notes in Computer Science, 2013, , 317-328.	1.0	78
88	Mandi: a market exchange for trading utility and cloud computing services. Journal of Supercomputing, 2013, 64, 1153-1174.	2.4	56
89	Automated SLA Negotiation Framework for Cloud Computing. , 2013, , .		20
90	A framework for ranking of cloud computing services. Future Generation Computer Systems, 2013, 29, 1012-1023.	4.9	699

#	Article	IF	Citations
91	Double auction-inspired meta-scheduling of parallel applications on global grids. Journal of Parallel and Distributed Computing, 2013, 73, 450-464.	2.7	27
92	An environment for modeling and simulation of message‑passing parallel applications for cloud computing. Software - Practice and Experience, 2013, 43, 1359-1375.	2.5	10
93	Revenue Maximization Using Adaptive Resource Provisioning in Cloud Computing Environments. , 2012, , .		44
94	SLA-based admission control for a Software-as-a-Service provider in Cloud computing environments. Journal of Computer and System Sciences, 2012, 78, 1280-1299.	0.9	180
95	NetworkCloudSim: Modelling Parallel Applications in Cloud Simulations. , 2011, , .		157
96	SMICloud: A Framework for Comparing and Ranking Cloud Services. , 2011, , .		226
97	SLA-Based Resource Provisioning for Heterogeneous Workloads in a Virtualized Cloud Datacenter. Lecture Notes in Computer Science, 2011, , 371-384.	1.0	72
98	SLA-Based Resource Allocation for Software as a Service Provider (SaaS) in Cloud Computing Environments. , 2011, , .		235
99	SLA-oriented resource provisioning for cloud computing: Challenges, architecture, and solutions. , 2011, , .		138
100	QoS-aware Deployment of Network of Virtual Appliances Across Multiple Clouds. , 2011, , .		20
101	Environment-conscious scheduling of HPC applications on distributed Cloud-oriented data centers. Journal of Parallel and Distributed Computing, 2011, 71, 732-749.	2.7	258
102	A linear programming-driven genetic algorithm for meta-scheduling on utility grids. International Journal of Parallel, Emergent and Distributed Systems, 2011, 26, 493-517.	0.7	40
103	Green Cloud Framework for Improving Carbon Efficiency of Clouds. Lecture Notes in Computer Science, 2011, , 491-502.	1.0	56
104	Provisioning Spot Market Cloud Resources to Create Cost-Effective Virtual Clusters. Lecture Notes in Computer Science, 2011, , 395-408.	1.0	19
105	Time and cost trade-off management for scheduling parallel applications on Utility Grids. Future Generation Computer Systems, 2010, 26, 1344-1355.	4.9	113
106	A Linear Programming Driven Genetic Algorithm for Meta-Scheduling on Utility Grids. , 2008, , .		14
107	A Meta-scheduler with Auction Based Resource Allocation for Global Grids. , 2008, , .		17