Sukhpal Singh Gill

List of Publications by Year
in descending order

90 papers	4,442 citations	136740 32 h-index	114278 63 g-index
94 all docs	94 docs citations	94 times ranked	3043 citing authors

#	Article	IF	Citations
1	Quantum and blockchain based <scp>Serverless</scp> edge computing: A vision, model, new trends and future directions. Internet Technology Letters, 2024, 7, e275.	1.4	35
2	IoT and Fog-Computing-Based Predictive Maintenance Model for Effective Asset Management in Industry 4.0 Using Machine Learning. IEEE Internet of Things Journal, 2023, 10, 2087-2094.	5.5	52
3	IoTPulse: machine learning-based enterprise health information system to predict alcohol addiction in Punjab (India) using IoT and fog computing. Enterprise Information Systems, 2022, 16, .	3.3	16
4	BioSec: A Biometric Authentication Framework for Secure and Private Communication Among Edge Devices in IoT and Industry 4.0. IEEE Consumer Electronics Magazine, 2022, 11, 51-56.	2.3	28
5	iFaaSBus: A Security- and Privacy-Based Lightweight Framework for Serverless Computing Using IoT and Machine Learning. IEEE Transactions on Industrial Informatics, 2022, 18, 3522-3529.	7.2	39
6	TRACTOR: Traffica€aware and powera€efficient virtual machine placement in edgea€cloud data centers using artificial bee colony optimization. International Journal of Communication Systems, 2022, 35, e4747.	1.6	22
7	Innovative software systems for managing the impact of the COVIDâ€19 pandemic. Software - Practice and Experience, 2022, 52, 821-823.	2.5	0
8	DoSP: A Deadline-Aware Dynamic Service Placement Algorithm for Workflow-Oriented IoT Applications in Fog-Cloud Computing Environments. Lecture Notes on Data Engineering and Communications Technologies, 2022, , 21-47.	0.5	12
9	A Manifesto for Modern Fog and Edge Computing: Vision, New Paradigms, Opportunities, and Future Directions. EAI/Springer Innovations in Communication and Computing, 2022, , 237-253.	0.9	11
10	Quantum computing: A taxonomy, systematic review and future directions. Software - Practice and Experience, 2022, 52, 66-114.	2.5	125
11	HUNTER: AI based holistic resource management for sustainable cloud computing. Journal of Systems and Software, 2022, 184, 111124.	3.3	33
12	<scp>BlockchainBus</scp>: A lightweight framework for secure virtual machine migration in cloud federations using blockchain. Security and Privacy, 2022, 5, e197.	1.9	8
13	HealthCloud: A system for monitoring health status of heart patients using machine learning and cloud computing. Internet of Things (Netherlands), 2022, 17, 100485.	4.9	40
14	Applications of blockchain in automated heavy vehicles: Yesterday, today, and tomorrow. , 2022, , 81-93.		4
15	FogDLearner: A Deep Learning-based Cardiac Health Diagnosis Framework using Fog Computing. , 2022, , .		6
16	<scp>IoTâ€Pi</scp>: A machine learninga€based lightweight framework for costa€effective distributed computing using <scp>IoT</scp>. Internet Technology Letters, 2022, 5, .	1.4	11
17	AI for next generation computing: Emerging trends and future directions. Internet of Things (Netherlands), 2022, 19, 100514.	4.9	202
18	Securing the future internet of things with posta€quantum cryptography. Security and Privacy, 2022, 5, .	1.9	21

#	Article	IF	Citations
19	Teaching and Facilitating an Online Learning Environment for a Web Programming Module. , 2022, , .		5
20	How Covid-19 Changed Computer Science Education. Itnow, 2022, 64, 60-61.	0.1	11
21	<scp>CovidXAI</scp>: explainable<scp>AI</scp>assisted web application for<scp>COVID</scp>â€19 vaccine prioritization. Internet Technology Letters, 2022, 5, .	1.4	5
22	A secure drone-to-drone communication and software defined drone network-enabled traffic monitoring system. Simulation Modelling Practice and Theory, 2022, 120, 102621.	2.2	10
23	Digital deviceâ€based active learning approach using virtual community classroom during the COVIDâ€19 pandemic. Computer Applications in Engineering Education, 2021, 29, 1007-1033.	2.2	31
24	<scp>EFFORT</scp>: Energy efficient framework for offload communication in mobile cloud computing. Software - Practice and Experience, 2021, 51, 1896-1909.	2.5	26
25	RHAS: robust hybrid auto-scaling for web applications in cloud computing. Cluster Computing, 2021, 24, 717-737.	3.5	22
26	A drone-based networked system and methods for combating coronavirus disease (COVID-19) pandemic. Future Generation Computer Systems, 2021, 115, 1-19.	4.9	180
27	Serverless Edge Computing: Vision and Challenges. , 2021, , .		92
28	Quantifying COVID-19 enforced global changes in atmospheric pollutants using cloud computing based remote sensing. Remote Sensing Applications: Society and Environment, 2021, 22, 100489.	0.8	13
29	Metaheuristics for scheduling of heterogeneous tasks in cloud computing environments: Analysis, performance evaluation, and future directions. Simulation Modelling Practice and Theory, 2021, 111, 102353.	2.2	42
30	Fog computing: A taxonomy, systematic review, current trends and research challenges. Journal of Parallel and Distributed Computing, 2021, 157, 56-85.	2.7	72
31	Dynamic Shift from Cloud Computing to Industry 4.0: Eco-Friendly Choice or Climate Change Threat. Lecture Notes on Data Engineering and Communications Technologies, 2021, , 275-293.	0.5	3
32	The evolution of distributed computing systems: from fundamental to new frontiers. Computing (Vienna/New York), 2021, 103, 1859-1878.	3.2	11
33	DEEDSP: Deadlineâ€aware and energyâ€efficient dynamic service placement in integrated Internet of Things and fog computing environments. Transactions on Emerging Telecommunications Technologies, 2021, 32, e4368.	2.6	5
34	START: Straggler Prediction and Mitigation for Cloud Computing Environments using Encoder LSTM Networks. IEEE Transactions on Services Computing, 2021, , 1-1.	3.2	8
35	Mobile Edge Computing Based Internet of Agricultural Things: A Systematic Review and Future Directions. , 2021, , 415-441.		6
36	STAR: SLA-aware Autonomic Management of Cloud Resources. IEEE Transactions on Cloud Computing, 2020, 8, 1040-1053.	3.1	64

#	Article	IF	Citations
37	Failure Management for Reliable Cloud Computing: A Taxonomy, Model, and Future Directions. Computing in Science and Engineering, 2020, 22, 52-63.	1.2	36
38	HealthFog: An ensemble deep learning based Smart Healthcare System for Automatic Diagnosis of Heart Diseases in integrated IoT and fog computing environments. Future Generation Computer Systems, 2020, 104, 187-200.	4.9	391
39	Next generation technologies for smart healthcare: challenges, vision, model, trends and future directions. Internet Technology Letters, 2020, 3, e145.	1.4	77
40	Agri-Info: Cloud Based Autonomic System for Delivering Agriculture as a Service. Internet of Things (Netherlands), 2020, 9, 100131.	4.9	29
41	<scp>HEART</scp>: Unrelated parallel machines problem with precedence constraints for task scheduling in cloud computing using heuristic and <scp>metaâ€heuristic</scp> algorithms. Software - Practice and Experience, 2020, 50, 2231-2251.	2.5	11
42	Energy Efficient Algorithms based on VM Consolidation for Cloud Computing: Comparisons and Evaluations. , 2020, , .		26
43	iThermoFog: IoTâ€Fog based automatic thermal profile creation for cloud data centers using artificial intelligence techniques. Internet Technology Letters, 2020, 3, e198.	1.4	15
44	Performance evaluation metrics for cloud, fog and edge computing: A review, taxonomy, benchmarks and standards for future research. Internet of Things (Netherlands), 2020, 12, 100273.	4.9	120
45	RGIM: An Integrated Approach to Improve QoS in AODV, DSR and DSDV Routing Protocols for FANETS Using the Chain Mobility Model. Computer Journal, 2020, 63, 1500-1512.	1.5	12
46	Predicting the growth and trend of COVID-19 pandemic using machine learning and cloud computing. Internet of Things (Netherlands), 2020, 11, 100222.	4.9	310
47	An innovative two-stage data compression scheme using adaptive block merging technique. The Integration VLSI Journal, 2020, 73, 68-76.	1.3	3
48	Security-Aware Autonomic Allocation of Cloud Resources. Journal of Organizational and End User Computing, 2020, 32, 15-22.	1.6	10
49	Tails in the cloud: a survey and taxonomy of straggler management within large-scale cloud data centres. Journal of Supercomputing, 2020, 76, 10050-10089.	2.4	13
50	<scp>DeepBus</scp>: Machine learning based real time pothole detection system for smart transportation using <scp>IoT</scp>. Internet Technology Letters, 2020, 3, e156.	1.4	37
51	Measuring the maturity of Indian small and medium enterprises for unofficial readiness for capability maturity model integrationâ€based software process improvement. Journal of Software: Evolution and Process, 2020, 32, e2261.	1.2	3
52	ThermoSim: Deep learning based framework for modeling and simulation of thermal-aware resource management for cloud computing environments. Journal of Systems and Software, 2020, 166, 110596.	3.3	35
53	IoT Based Agriculture as a Cloud and Big Data Service. , 2020, , 1499-1521.		0
54	IoT Based Agriculture as a Cloud and Big Data Service. , 2020, , 438-461.		0

#	Article	IF	Citations
55	Sustainable Cloud Computing Realization for Different Applications: A Manifesto. Lecture Notes on Data Engineering and Communications Technologies, 2019, , 95-117.	0.5	5
56	RADAR: Selfâ€configuring and selfâ€healing in resource management for enhancing quality of cloud services. Concurrency Computation Practice and Experience, 2019, 31, e4834.	1.4	26
57	Transformative effects of IoT, Blockchain and Artificial Intelligence on cloud computing: Evolution, vision, trends and open challenges. Internet of Things (Netherlands), 2019, 8, 100118.	4.9	242
58	Holistic resource management for sustainable and reliable cloud computing: An innovative solution to global challenge. Journal of Systems and Software, 2019, 155, 104-129.	3.3	55
59	ROUTER: Fog enabled cloud based intelligent resource management approach for smart home IoT devices. Journal of Systems and Software, 2019, 154, 125-138.	3.3	122
60	Bio-Inspired Algorithms for Big Data Analytics: A Survey, Taxonomy, and Open Challenges. , 2019, , 1-17.		14
61	Fog-Based Smart Healthcare as a Big Data and Cloud Service for Heart Patients Using IoT. Lecture Notes on Data Engineering and Communications Technologies, 2019, , 1376-1383.	0.5	33
62	A Taxonomy and Future Directions for Sustainable Cloud Computing. ACM Computing Surveys, 2019, 51, 1-33.	16.1	90
63	Resource Provisioning Based Scheduling Framework for Execution of Heterogeneous and Clustered Workloads in Clouds: from Fundamental to Autonomic Offering. Journal of Grid Computing, 2019, 17, 385-417.	2.5	49
64	PRISM. , 2019, , .		4
65	SECURE: Self-Protection Approach in Cloud Resource Management. IEEE Cloud Computing, 2018, 5, 60-72.	5.3	25
66	BULLET: Particle Swarm Optimization Based Scheduling Technique for Provisioned Cloud Resources. Journal of Network and Systems Management, 2018, 26, 361-400.	3.3	61
67	CHOPPER: an intelligent QoS-aware autonomic resource management approach for cloud computing. Cluster Computing, 2018, 21, 1203-1241.	3.5	62
68	The Future of Cloud Computing: Opportunities, Challenges and Research Trends. , 2018, , .		15
69	Big Data Analytics Based Recommender System for Value Added Services (VAS). Advances in Intelligent Systems and Computing, 2017, , 142-150.	0.5	7
70	The Journey of QoS-Aware Autonomic Cloud Computing. IT Professional, 2017, 19, 42-49.	1.4	32
71	IoT Based Agriculture as a Cloud and Big Data Service. Journal of Organizational and End User Computing, 2017, 29, 1-23.	1.6	93
72	Framework for Targeting High Value Customers and Potential Churn Customers in Telecom using Big Data Analytics. International Journal of Education and Management Engineering, 2017, 7, 36-45.	0.8	12

#	Article	IF	Citations
73	EARTH: Energy-aware autonomic resource scheduling in cloud computing. Journal of Intelligent and Fuzzy Systems, 2016, 30, 1581-1600.	0.8	46
74	SOCCER: Self-Optimization of Energy-efficient Cloud Resources. Cluster Computing, 2016, 19, 1787-1800.	3.5	49
75	Resource provisioning and scheduling in clouds: QoS perspective. Journal of Supercomputing, 2016, 72, 926-960.	2.4	57
76	Cloud resource provisioning: survey, status and future research directions. Knowledge and Information Systems, 2016, 49, 1005-1069.	2.1	112
77	A Survey on Resource Scheduling in Cloud Computing: Issues and Challenges. Journal of Grid Computing, 2016, 14, 217-264.	2.5	373
78	QoS-Aware Autonomic Resource Management in Cloud Computing. ACM Computing Surveys, 2016, 48, 1-46.	16.1	147
79	Model for Targeting Customers Based on Analytics in Telecom Domain. International Journal of Modern Education and Computer Science, 2016, 8, 43-49.	2.4	4
80	Q-aware: Quality of service based cloud resource provisioning. Computers and Electrical Engineering, 2015, 47, 138-160.	3.0	90
81	QRSF: QoS-aware resource scheduling framework in cloud computing. Journal of Supercomputing, 2015, 71, 241-292.	2.4	120
82	Energy based Efficient Resource Scheduling: A Step Towards Green Computing. International Journal of Energy Information and Communications, 2014, 5, 35-52.	0.2	12
83	Quality of Service and Service Level Agreements for Cloud Environments: Issues and Challenges. Computer Communications and Networks, 2014, , 51-72.	0.8	21
84	Z language based an algorithm for event detection, analysis and classification in machine vision. , 2013, , .		1
85	Consistency verification and quality assurance (CVQA) traceability framework for SaaS. , 2013, , .		12
86	Introducing Agility in Cloud Based Software Development through ASD. International Journal of U- and E- Service, Science and Technology, 2013, 6, 191-202.	0.1	12
87	Advance Billing and Metering Architecture for Infrastructure as a Service. International Journal of Cloud Computing and Services Science (IJ-CLOSER), 2013, 2, .	0.6	10
88	Cloud Based Development Issues: A Methodical Analysis. International Journal of Cloud Computing and Services Science (IJ-CLOSER), 2012, 2, .	0.6	10
89	Recommender System for Optimal Distributed Deep Learning in Cloud Datacenters. Wireless Personal Communications, 0, , 1.	1.8	0
90	BioLearner: A Machine Learning-Powered Smart Heart Disease Risk Prediction System Utilizing Biomedical Markers. Journal of Interconnection Networks, 0, , .	0.6	4