Iyad Katib

List of Publications by Year
in descending order

78 papers	**2,056** citations	394286 **19** h-index	254106 **43** g-index
80 all docs	**80** docs citations	**80** times ranked	**1808** citing authors

#	Article	IF	Citations
1	Data Fusion and IoT for Smart Ubiquitous Environments: A Survey. IEEE Access, 2017, 5, 9533-9554.	2.6	300
2	Spectrum management techniques for elastic optical networks: A survey. Optical Switching and Networking, 2014, 13, 34-48.	1.2	182
3	UbeHealth: A Personalized Ubiquitous Cloud and Edge-Enabled Networked Healthcare System for Smart Cities. IEEE Access, 2018, 6, 32258-32285.	2.6	181
4	Analysis of Eight Data Mining Algorithms for Smarter Internet of Things (IoT). Procedia Computer Science, 2016, 98, 437-442.	1.2	142
5	UTiLearn: A Personalised Ubiquitous Teaching and Learning System for Smart Societies. IEEE Access, 2017, 5, 2615-2635.	2.6	113
6	Distributed Artificial Intelligence-as-a-Service (DAIaaS) for Smarter IoE and 6G Environments. Sensors, 2020, 20, 5796.	2.1	73
7	Sehaa: A Big Data Analytics Tool for Healthcare Symptoms and Diseases Detection Using Twitter, Apache Spark, and Machine Learning. Applied Sciences (Switzerland), 2020, 10, 1398.	1.3	69
8	Enabling Next Generation Logistics and Planning for Smarter Societies. Procedia Computer Science, 2017, 109, 1122-1127.	1.2	68
9	Smarter Traffic Prediction Using Big Data, In-Memory Computing, Deep Learning and GPUs. Sensors, 2019, 19, 2206.	2.1	67
10	COVID-19: Detecting Government Pandemic Measures and Public Concerns from Twitter Arabic Data Using Distributed Machine Learning. International Journal of Environmental Research and Public Health, 2021, 18, 282.	1.2	52
11	Enabling Smarter Societies through Mobile Big Data Fogs and Clouds. Procedia Computer Science, 2017, 109, 1128-1133.	1.2	44
12	Rapid Transit Systems: Smarter Urban Planning Using Big Data, In-Memory Computing, Deep Learning, and GPUs. Sustainability, 2019, 11, 2736.	1.6	41
13	Iktishaf+: A Big Data Tool with Automatic Labeling for Road Traffic Social Sensing and Event Detection Using Distributed Machine Learning. Sensors, 2021, 21, 2993.	2.1	41
14	Spectrum Assignment in Optical Networks: A Multiprocessor Scheduling Perspective. Journal of Optical Communications and Networking, 2014, 6, 754.	3.3	37
15	Iktishaf: a Big Data Road-Traffic Event Detection Tool Using Twitter and Spark Machine Learning. Mobile Networks and Applications, 2023, 28, 603-618.	2.2	36
16	iResponse: An AI and IoT-Enabled Framework for Autonomous COVID-19 Pandemic Management. Sustainability, 2021, 13, 3797.	1.6	36
17	Saudi-KAU Coupled Global Climate Model: Description and Performance. Earth Systems and Environment, 2017, 1, 1.	3.0	33
18	UbiPriSEQâ€"Deep Reinforcement Learning to Manage Privacy, Security, Energy, and QoS in 5G IoT HetNets. Applied Sciences (Switzerland), 2020, 10, 7120.	1.3	33

#	Article	IF	Citations
19	IP/MPLS-over-OTN-over-DWDM Multilayer Networks: An Integrated Three-Layer Capacity Optimization Model, a Heuristic, and a Study. IEEE Transactions on Network and Service Management, 2012, 9, 240-253.	3.2	26
20	TAAWUN: a Decision Fusion and Feature Specific Road Detection Approach for Connected Autonomous Vehicles. Mobile Networks and Applications, 2023, 28, 636-652.	2.2	25
21	Musawah: A Data-Driven AI Approach and Tool to Co-Create Healthcare Services with a Case Study on Cancer Disease in Saudi Arabia. Sustainability, 2022, 14, 3313.	1.6	23
22	A Fog-Augmented Machine Learning based SMS Spam Detection and Classification System. , 2020, , .		22
23	SURAA: A Novel Method and Tool for Loadbalanced and Coalesced SpMV Computations on GPUs. Applied Sciences (Switzerland), 2019, 9, 947.	1.3	19
24	Road Traffic Event Detection Using Twitter Data, Machine Learning, and Apache Spark. , 2019, , .		19
25	Imtidad: A Reference Architecture and a Case Study on Developing Distributed AI Services for Skin Disease Diagnosis over Cloud, Fog and Edge. Sensors, 2022, 22, 1854.	2.1	19
26	ZAKI+: A Machine Learning Based Process Mapping Tool for SpMV Computations on Distributed Memory Architectures. IEEE Access, 2019, 7, 81279-81296.	2.6	16
27	Big Data Tools, Technologies, and Applications: A Survey. EAI/Springer Innovations in Communication and Computing, 2020, , 453-490.	0.9	16
28	Big Data and HPC Convergence: The Cutting Edge and Outlook. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2018, , 11-26.	0.2	16
29	D2TFRS: An Object Recognition Method for Autonomous Vehicles Based on RGB and Spatial Values of Pixels. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2018, , 155-168.	0.2	15
30	ZAKI: A Smart Method and Tool for Automatic Performance Optimization of Parallel SpMV Computations on Distributed Memory Machines. Mobile Networks and Applications, 2023, 28, 744-763.	2.2	15
31	The Role of Big Data and Twitter Data Analytics in Healthcare Supply Chain Management. EAI/Springer Innovations in Communication and Computing, 2020, , 267-279.	0.9	15
32	Adaptive alternate routing in WDM networks and its performance tradeoffs in the presence of wavelength converters. Optical Switching and Networking, 2009, 6, 181-193.	1.2	14
33	Analysis of round-robin load-balancing algorithm with adaptive and predictive approaches. , 2016, , .		14
34	Location Privacy in Smart Cities Era. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2018, , 123-138.	0.2	13
35	LidSonic for Visually Impaired: Green Machine Learning-Based Assistive Smart Glasses with Smart App and Arduino. Electronics (Switzerland), 2022, 11, 1076.	1.8	13
36	Novel congestion avoidance scheme for Internet of Drones. Computer Communications, 2021, 169, 202-210.	3.1	12

#	ARTICLE	IF	CITATIONS
37	Discovering Urban Governance Parameters for Online Learning in Saudi Arabia During COVID-19 Using Topic Modeling of Twitter Data. Frontiers in Sustainable Cities, 0, 4, .	1.2	12
38	Sentiment Analysis of Arabic Tweets in Smart Cities: A Review of Saudi Dialect. , 2019, , .		11
39	Big Data and HPC Convergence for Smart Infrastructures: A Review and Proposed Architecture. EAI/Springer Innovations in Communication and Computing, 2020, , 561-586.	0.9	11
40	Network protection design models, a heuristic, and a study for concurrent single-link per layer failures in three-layer networks. Computer Communications, 2013, 36, 678-688.	3.1	10
41	Sentiment Analysis of Arabic Tweets for Road Traffic Congestion and Event Detection. EAI/Springer Innovations in Communication and Computing, 2020, , 37-54.	0.9	10
42	Performance Analysis of Sparse Matrix-Vector Multiplication (SpMV) on Graphics Processing Units (GPUs). Electronics (Switzerland), 2020, 9, 1675.	1.8	10
43	DIESEL: A novel deep learning-based tool for SpMV computations and solving sparse linear equation systems. Journal of Supercomputing, 2021, 77, 6313-6355.	2.4	10
44	Optimizing Node Capacity in Multilayer Networks. IEEE Communications Letters, 2011, 15, 581-583.	2.5	9
45	On Routing and Spectrum Assignment in Rings. Journal of Lightwave Technology, 2015, 33, 151-160.	2.7	9
46	Comparison of Decision Trees and Deep Learning for Object Classification in Autonomous Driving. EAI/Springer Innovations in Communication and Computing, 2020, , 135-158.	0.9	9
47	A Smart Disaster Management System for Future Cities Using Deep Learning, GPUs, and In-Memory Computing. EAI/Springer Innovations in Communication and Computing, 2020, , 159-184.	0.9	9
48	Ontology Design for Solving Computationally-Intensive Problems on Heterogeneous Architectures. Sustainability, 2018, 10, 441.	1.6	7
49	Big Data for Smart Infrastructure Design: Opportunities and Challenges. EAI/Springer Innovations in Communication and Computing, 2020, , 491-518.	0.9	7
50	A Scalable Solution to Network Design Problems: Decomposition with Exhaustive Routing Search. , 2020, , .		7
51	Comparison of Network Protection in Three-Layer IP/MPLS-over-OTN-over-DWDM Networks. , 2015, , .		5
52	In-Memory Deep Learning Computations on GPUs for Prediction of Road Traffic Incidents Using Big Data Fusion. EAI/Springer Innovations in Communication and Computing, 2020, , 79-114.	0.9	5
53	Software Engineering for IoT-Driven Data Analytics Applications. IEEE Access, 2021, 9, 48197-48217.	2.6	5
54	A Network Optimization Model for Multi-layer IP/MPLS over OTN/DWDM Networks. Lecture Notes in Computer Science, 2009, , 180-185.	1.0	5

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55	A network protection design model and a study of three-layer networks with IP/MPLS, OTN, and DWDM. , 2011, , .		4
56	Spectrum Assignment in Mesh Elastic Optical Networks. , 2015, , .		4
57	Spectrum assignment in rings with shortest-path routing: Complexity and approximation algorithms. , 2015, , .		4
58	Parallel Sparse Matrix Vector Multiplication on Intel MIC: Performance Analysis. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2018, , 306-322.	0.2	4
59	Financial accounting measurement model based on numerical analysis of rigid normal differential equation and rigid generalised functional equation. Applied Mathematics and Nonlinear Sciences, 2022, 7, 541-548.	0.9	4
60	Performance improvement of the parallel smith waterman algorithm implementation using Hybrid MPI-OpenMP model. , 2016, , .		3
61	The Spatial Form of Digital Nonlinear Landscape Architecture Design Based on Computer Big Data. Applied Mathematics and Nonlinear Sciences, 2022, 7, 783-790.	0.9	2
62	Performance of distributed reservation control in wavelength-routed all-optical WDM networks with Adaptive Alternate Routing. , 2009, , .		1
63	Offline Distance-Adaptive Routing and Spectrum Assignment (DA-RSA) in Rings. , 2015, , .		1
64	On time dependent routing algorithms for open marketplaces of path services with support for in-advance path reservation. Computer Networks, 2018, 138, 201-212.	3.2	1
65	Performance Evaluation of Brute Force Techniques for Routing and Spectrum Assignment in Elastic Optical Network Using MPI and CUDA. , 2018, , .		1
66	Research on the Psychological Distribution Delay of Artificial Neural Network Based on the Analysis of Differential Equation by Inequality Expansion and Contraction Method. Applied Mathematics and Nonlinear Sciences, 2021, .	0.9	1
67	Performance Evaluation of Jacobi Iterative Solution for Sparse Linear Equation System on Multicore and Manycore Architectures. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2018, , 296-305.	0.2	1
68	A Framework for Faster Porting of Scientific Applications Between Heterogeneous Clouds. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2018, , 27-43.	0.2	1
69	Distanceâ€adaptive routing and spectrum assignment in rings. IET Networks, 2016, 5, 64-70.	1.1	1
70	Masdar: A Novel Sequence-to-Sequence Deep Learning Model for Arabic Stemming. Advances in Intelligent Systems and Computing, 2020, , 363-373.	0.5	1
71	Comparison of Network Protection in Three-Layer IP/MPLS-over-OTN-over-DWDM Networks. , 2014, , .		0
72	Offline Distance-Adaptive Routing and Spectrum Assignment (DA-RSA) in Rings. , 2014, , .		0

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73	Ontological Design to Support Cognitive Plasticity for Creative Immersive Experience in Computer Aided Learning. Lecture Notes in Computer Science, 2015, , 261-270.	1.0	0
74	Offline Distance-Adaptive Routing and Spectrum Assignment in Mesh Elastic Optical Networks. , 2016, , .		0
75	Fast Implementation of Face Detection Using LPB Classifier on GPGPUs. Advances in Intelligent Systems and Computing, 2019, , 1036-1047.	0.5	0
76	Recursive algorithm for selecting optimum routing tables to solve offline routing and spectrum assignment problem. Ain Shams Engineering Journal, 2020, 11, 273-280.	3.5	0
77	Parameter Estimation of Nonlinear Output Error System under Variational Bayesian of Probabilistic Graphical Model. Fractals, 0, , .	1.8	0
78	Exhaustive Search for Optimal Offline Spectrum Assignment in Elastic Optical Networks. International Journal of Computers, Communications and Control, 2020, 15, .	1.2	0