Mahmoud Al-Ayyoub

List of Publications by Year
in descending order

113 papers	4,184 citations	201575 27 h-index	182361 51 g-index
114 all docs	114 docs citations	114 times ranked	3449 citing authors

#	Article	IF	Citations
1	SemEval-2016 Task 5: Aspect Based Sentiment Analysis. , 2016, , .		705
2	Deep Recurrent neural network vs. support vector machine for aspect-based sentiment analysis of Arabic hotels' reviews. Journal of Computational Science, 2018, 27, 386-393.	1.5	227
3	Arabic sentiment analysis: Lexicon-based and corpus-based. , 2013, , .		176
4	The Internet of Energy: Smart Sensor Networks and Big Data Management for Smart Grid. Procedia Computer Science, 2015, 56, 592-597.	1.2	168
5	SDIoT: a software defined based internet of things framework. Journal of Ambient Intelligence and Humanized Computing, 2015, 6, 453-461.	3.3	159
6	Using long short-term memory deep neural networks for aspect-based sentiment analysis of Arabic reviews. International Journal of Machine Learning and Cybernetics, 2019, 10, 2163-2175.	2.3	151
7	Impact of digital fingerprint image quality on the fingerprint recognition accuracy. Multimedia Tools and Applications, 2019, 78, 3649-3688.	2.6	150
8	A comprehensive survey of arabic sentiment analysis. Information Processing and Management, 2019, 56, 320-342.	5.4	121
9	Enhancing Aspect-Based Sentiment Analysis of Arabic Hotels' reviews using morphological, syntactic and semantic features. Information Processing and Management, 2019, 56, 308-319.	5.4	121
10	Deep learning for Arabic NLP: A survey. Journal of Computational Science, 2018, 26, 522-531.	1.5	99
11	Software defined cloud: Survey, system and evaluation. Future Generation Computer Systems, 2016, 58, 56-74.	4.9	98
12	Parallel implementation for 3D medical volume fuzzy segmentation. Pattern Recognition Letters, 2020, 130, 312-318.	2.6	90
13	Multi-agent based dynamic resource provisioning and monitoring for cloud computing systems infrastructure. Cluster Computing, 2015, 18, 919-932.	3.5	89
14	CloudExp: A comprehensive cloud computing experimental framework. Simulation Modelling Practice and Theory, 2014, 49, 180-192.	2.2	81
15	Towards Improving the Lexicon-Based Approach for Arabic Sentiment Analysis. International Journal of Information Technology and Web Engineering, 2014, 9, 55-71.	1.2	70
16	Paraphrase identification and semantic text similarity analysis in Arabic news tweets using lexical, syntactic, and semantic features. Information Processing and Management, 2017, 53, 640-652.	5.4	67
17	Accelerating compute intensive medical imaging segmentation algorithms using hybrid CPU-GPU implementations. Multimedia Tools and Applications, 2017, 76, 3537-3555.	2.6	64
18	Accelerating 3D medical volume segmentation using GPUs. Multimedia Tools and Applications, 2018, 77, 4939-4958.	2.6	59

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19	Automatic Arabic text categorization: A comprehensive comparative study. Journal of Information Science, 2015, 41, 114-124.	2.0	56
20	Chest X-ray pneumothorax segmentation using U-Net with EfficientNet and ResNet architectures. PeerJ Computer Science, 2021, 7, e607.	2.7	54
21	SDStorage: A Software Defined Storage Experimental Framework. , 2015, , .		51
22	A GPU-based implementations of the fuzzy C-means algorithms for medical image segmentation. Journal of Supercomputing, 2015, 71, 3149-3162.	2.4	47
23	Recognizing Emotion from Speech Based on Age and Gender Using Hierarchical Models. Procedia Computer Science, 2019, 151, 37-44.	1.2	47
24	A Fog Computing Based System for Selective Forwarding Detection in Mobile Wireless Sensor Networks. , 2016, , .		44
25	Software-Defined System Support for Enabling Ubiquitous Mobile Edge Computing. Computer Journal, 2017, 60, 1443-1457.	1.5	44
26	Enhanced 3D segmentation techniques for reconstructed 3D medical volumes: Robust and Accurate Intelligent System. Procedia Computer Science, 2017, 113, 531-538.	1.2	44
27	Collusion attacks mitigation in internet of things: a fog based model. Multimedia Tools and Applications, 2018, 77, 18249-18268.	2.6	37
28	SDDC: A Software Defined Datacenter Experimental Framework. , 2015, , .		34
29	A hierarchical optimization model for energy data flow in smart grid power systems. Information Systems, 2015, 53, 190-200.	2.4	34
30	SDSecurity: A Software Defined Security experimental framework. , 2015, , .		32
31	Cloud support for large scale e-healthcare systems. Annales Des Telecommunications/Annals of Telecommunications, 2016, 71, 503-515.	1.6	31
32	Improving the performance of the needleman-wunsch algorithm using parallelization and vectorization techniques. Multimedia Tools and Applications, 2019, 78, 3961-3977.	2.6	30
33	Cooperative mobile edge computing system for VANET-based software-defined content delivery. Computers and Electrical Engineering, 2018, 71, 388-397.	3.0	29
34	Machine learning approach for brain tumor detection. , 2012, , .		28
35	Feature extraction and selection for Arabic tweets authorship authentication. Journal of Ambient Intelligence and Humanized Computing, 2017, 8, 383-393.	3.3	26
36	Leveraging fog computing and software defined systems for selective forwarding attacks detection in mobile wireless sensor networks. Transactions on Emerging Telecommunications Technologies, 2018, 29, e3183.	2.6	26

#	Article	IF	Citations
37	On authorship authentication of Arabic articles. , 2014, , .		25
38	Power Optimization of Large Scale Mobile Cloud Computing Systems. , 2015, , .		25
39	A GPU-based breast cancer detection system using Single Pass Fuzzy C-Means clustering algorithm. , 2016, , .		25
40	Author gender identification from Arabic text. Journal of Information Security and Applications, 2017, 35, 85-95.	1.8	25
41	Integration of renewable energy in demand-side management for home appliances. , 2014, , .		24
42	An extensive study of the Bag-of-Words approach for gender identification of Arabic articles. , 2014, , .		24
43	Delay-aware power optimization model for mobile edge computing systems. Personal and Ubiquitous Computing, 2017, 21, 1067-1077.	1.9	24
44	Emotion analysis of Arabic articles and its impact on identifying the author's gender. , 2015, , .		23
45	Unsupervised dialectal neural machine translation. Information Processing and Management, 2020, 57, 102181.	5.4	23
46	Arabic Text Diacritization Using Deep Neural Networks. , 2019, , .		22
47	Joint Routing, Channel Assignment, and Scheduling for Throughput Maximization in General Interference Models. IEEE Transactions on Mobile Computing, 2010, 9, 553-565.	3.9	21
48	Multi-Label Emotion Classification for Arabic Tweets. , 2019, , .		21
49	Improving fuzzy C-mean-based community detection in social networks using dynamic parallelism. Computers and Electrical Engineering, 2019, 74, 533-546.	3.0	21
50	Enhancing human activity recognition using deep learning and time series augmented data. Journal of Ambient Intelligence and Humanized Computing, 2021, 12, 10565-10580.	3.3	21
51	Improving FCM and T2FCM algorithms performance using GPUs for medical images segmentation. , 2015, , .		20
52	Studying the controversy in online crowds' interactions. Applied Soft Computing Journal, 2018, 66, 557-563.	4.1	19
53	An experimental framework for future smart cities using data fusion and software defined systems: The case of environmental monitoring for smart healthcare. Future Generation Computer Systems, 2020, 107, 883-897.	4.9	19
54	Using Enhanced Lexicon-Based Approaches for the Determination of Aspect Categories and Their Polarities in Arabic Reviews. International Journal of Information Technology and Web Engineering, 2016, 11, 15-31.	1.2	18

#	ARTICLE	IF	CITATIONS
55	Accelerating compute-intensive image segmentation algorithms using GPUs. Journal of Supercomputing, 2017, 73, 1929-1951.	2.4	18
56	Computer-aided diagnosis of lumbar disc herniation. , 2015, , .		17
57	Evaluating map reduce tasks scheduling algorithms over cloud computing infrastructure. Concurrency Computation Practice and Experience, 2015, 27, 5686-5699.	1.4	15
58	Collusion attacks in Internet of Things: Detection and mitigation using a fog based model. , 2017, , .		15
59	Energy efficient dynamic resource management in cloud computing based on logistic regression model and median absolute deviation. Sustainable Computing: Informatics and Systems, 2018, 19, 262-274.	1.6	15
60	An extensive study of authorship authentication of Arabic articles. International Journal of Web Information Systems, 2017, 13, 85-104.	1.3	14
61	Text detection and script identification in natural scene images using deep learning. Computers and Electrical Engineering, 2021, 91, 107043.	3.0	14
62	Using GPUs to speed-up FCM-based community detection in Social Networks. , 2016, , .		13
63	Resilient service provisioning in cloud based data centers. Future Generation Computer Systems, 2018, 86, 765-774.	4.9	13
64	To Build or Not to Build? Addressing the Expansion Strategies of Cloud Providers. , 2014, , .		11
65	Software Defined Cognitive Radio Network Framework. International Journal of Grid and High Performance Computing, 2015, 7, 15-31.	0.7	11
66	Using the Panama Papers to explore the financial networks of the Middle East. , 2016, , .		11
67	Using Dynamic Parallelism to Speed Up Clustering-Based Community Detection in Social Networks. , 2016, , .		11
68	Parallel implementation of FCM-based volume segmentation of 3D images. , 2016, , .		10
69	Accelerating Levenshtein and Damerau edit distance algorithms using GPU with unified memory. , 2017, , .		10
70	A scalable multiple pairwise protein sequence alignment acceleration using hybrid CPU–GPU approach. Cluster Computing, 2020, 23, 2677-2688.	3.5	10
71	Visual question answering in the medical domain based on deep learning approaches: A comprehensive study. Pattern Recognition Letters, 2021, 150, 57-75.	2.6	10
72	A hybrid CPU-GPU implementation to accelerate multiple pairwise protein sequence alignment. , 2017, , .		9

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73	Using Logistic Regression to Improve Virtual Machines Management in Cloud Computing Systems. , 2017, , .		9
74	Bidirectional Gated Recurrent Units For Human Activity Recognition Using Accelerometer Data. , 2019, , .		9
75	Software Defined based smart grid architecture. , 2015, , .		8
76	On the road to the Internet of Biometric Things: A survey of fingerprint acquisition technologies and fingerprint databases. , 2016, , .		8
77	Using GPUs to speed-up Levenshtein edit distance computation. , 2016, , .		7
78	Virtualization-based Cognitive Radio Networks. Journal of Systems and Software, 2016, 117, 15-29.	3.3	6
79	GPU parallelization of sequence segmentation using information theoretic models. Simulation Modelling Practice and Theory, 2018, 86, 11-24.	2.2	6
80	Determine Bipolar Disorder Level from Patient Interviews Using Bi-LSTM and Feature Fusion. , 2018, , .		6
81	A Brief Analysis of Amazon Online Reviews. , 2019, , .		6
82	Toward a new approach for sorting extremely large data files in the big data era. Cluster Computing, 2019, 22, 819-828.	3.5	6
83	An Android Malware Detection Leveraging Machine Learning. Wireless Communications and Mobile Computing, 2022, 2022, 1-12.	0.8	6
84	Exploiting GPUs to accelerate clustering algorithms. , 2016, , .		5
85	A novel framework for software defined based secure storage systems. Simulation Modelling Practice and Theory, 2017, 77, 407-423.	2.2	5
86	SIFT based ROI extraction for lumbar disk herniation CAD system from MRI axial scans. Journal of Ambient Intelligence and Humanized Computing, 0, , 1.	3.3	5
87	Measuring user influence in a co-reviewer network. , 2018, , .		5
88	The Audio-Visual Arabic Dataset for Natural Emotions. , 2019, , .		5
89	E-learningDJUST: E-learning dataset from Jordan university of science and technology toward investigating the impact of COVID-19 pandemic on education. Neural Computing and Applications, 2023, 35, 11481-11495.	3.2	5
90	Collaboration Networks of Levantine Biomedical Researchers. , 2014, , .		4

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91	A compression-based technique to classify metamorphic malware. , 2016, , .		4
92	MedGraph: a graph-based representation and computation to handle large sets of images. Multimedia Tools and Applications, 2017, 76, 2769-2785.	2.6	4
93	Software-defined systems support for secure cloud computing based on data classification. Annales Des Telecommunications/Annals of Telecommunications, 2017, 72, 335-345.	1.6	4
94	An extended study of collaboration networks of Levantine biomedical researchers. Journal of Ambient Intelligence and Humanized Computing, 2018, 9, 3-18.	3.3	4
95	Collaboration networks of arab biomedical researchers. Multimedia Tools and Applications, 2019, 78, 33435-33455.	2.6	4
96	A Deep Learning Approach to Classify and Quantify the Multiple Emotions of Arabic Tweets. , 2021, , .		4
97	Personalized human activity recognition using deep learning and edge-cloud architecture. Journal of Ambient Intelligence and Humanized Computing, 2023, 14, 12021-12033.	3.3	4
98	Leveraging Software-Defined-Networking for Energy Optimisation in Mobile-Cloud-Computing. Procedia Computer Science, 2016, 94, 479-484.	1.2	3
99	Power Optimization of Large Scale Mobile Cloud System Using Cooperative Cloudlets. , 2016, , .		3
100	Plant Classification in the Wild: A Transfer Learning Approach. , 2018, , .		3
101	Identifying influential positively perceived users in co-purchase networks. , 2018, , .		3
102	Atar: Attention-based LSTM for Arabizi transliteration. International Journal of Electrical and Computer Engineering, 2021, 11, 2327.	0.5	3
103	SDCache: Software Defined Data Caching Control for Cloud Services. , 2016, , .		2
104	Deep Learning-Based Disk Herniation Computer Aided Diagnosis System From MRI Axial Scans. IEEE Access, 2022, 10, 32315-32323.	2.6	2
105	Plant classification in the wild: Energy evaluation for deep learning models. Multimedia Tools and Applications, 2022, 81, 30143-30167.	2.6	2
106	Building an Image Database for Studying Image Retargeting. , 2017, , .		1
107	Fast exact sequence alignment using parallel computing. , 2018, , .		1
108	A GPU-Based Smith-Waterman Approach for Genome Editing. Advances in Intelligent Systems and Computing, 2019, , 347-352.	0.5	1

#	Article	IF	Citations
109	MUMBA: Multi-unit multi-broker auctions for CRNs. , 2017, , .		0
110	Using a Hierarchical Softmax Based on the Huffman Coding Tree for Authenticating Arabic Tweets. , 2019, , .		0
111	Improving classification and clustering techniques using GPUs. Concurrency Computation Practice and Experience, 2020, 32, e5538.	1.4	0
112	Social Network Analysis of the Panama Papers Concentrating on the MENA Region. Computer Journal, 0, , .	1.5	0
113	Neural Arabic Text Diacritization: State-of-the-Art Results and a Novel Approach for Arabic NLP Downstream Tasks. ACM Transactions on Asian and Low-Resource Language Information Processing, 2022, 21, 1-25.	1.3	0