

# Mahmoud Al-Ayyoub

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2094587/publications.pdf>

Version: 2024-02-01

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  | 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         |
| 2  | 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         |
| 3  | 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         |
| 4  | Deep Learning-Based Disk Herniation Computer Aided Diagnosis System From MRI Axial Scans. IEEE Access, 2022, 10, 32315-32323.  | 2.6 | 2         |
| 5  | Plant classification in the wild: Energy evaluation for deep learning models. Multimedia Tools and Applications, 2022, 81, 30143-30167.  | 2.6 | 2         |
| 6  | An Android Malware Detection Leveraging Machine Learning. Wireless Communications and Mobile Computing, 2022, 2022, 1-12.  | 0.8 | 6         |
| 7  | A Deep Learning Approach to Classify and Quantify the Multiple Emotions of Arabic Tweets. , 2021, , .  |     | 4         |
| 8  | Text detection and script identification in natural scene images using deep learning. Computers and Electrical Engineering, 2021, 91, 107043.  | 3.0 | 14        |
| 9  | Atar: Attention-based LSTM for Arabizi transliteration. International Journal of Electrical and Computer Engineering, 2021, 11, 2327.  | 0.5 | 3         |
| 10 | Chest X-ray pneumothorax segmentation using U-Net with EfficientNet and ResNet architectures. PeerJ Computer Science, 2021, 7, e607.   | 2.7 | 54        |
| 11 | 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        |
| 12 | 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        |
| 13 | 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        |
| 14 | Parallel implementation for 3D medical volume fuzzy segmentation. Pattern Recognition Letters, 2020, 130, 312-318.   | 2.6 | 90        |
| 15 | Improving classification and clustering techniques using GPUs. Concurrency Computation Practice and Experience, 2020, 32, e5538.   | 1.4 | 0         |
| 16 | A scalable multiple pairwise protein sequence alignment acceleration using hybrid CPU&#x2013;GPU approach. Cluster Computing, 2020, 23, 2677-2688.   | 3.5 | 10        |
| 17 | Unsupervised dialectal neural machine translation. Information Processing and Management, 2020, 57, 102181.  | 5.4 | 23        |
| 18 | Arabic Text Diacritization Using Deep Neural Networks. , 2019, , .   |     | 22        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Recognizing Emotion from Speech Based on Age and Gender Using Hierarchical Models. <i>Procedia Computer Science</i> , 2019, 151, 37-44.   | 1.2 | 47        |
| 20 | A GPU-Based Smith-Waterman Approach for Genome Editing. <i>Advances in Intelligent Systems and Computing</i> , 2019, , 347-352.   | 0.5 | 1         |
| 21 | Using a Hierarchical Softmax Based on the Huffman Coding Tree for Authenticating Arabic Tweets. , 2019, , .   |     | 0         |
| 22 | Bidirectional Gated Recurrent Units For Human Activity Recognition Using Accelerometer Data. , 2019, , .  |     | 9         |
| 23 | The Audio-Visual Arabic Dataset for Natural Emotions. , 2019, , .   |     | 5         |
| 24 | A Brief Analysis of Amazon Online Reviews. , 2019, , .  |     | 6         |
| 25 | Multi-Label Emotion Classification for Arabic Tweets. , 2019, , .   |     | 21        |
| 26 | Collaboration networks of arab biomedical researchers. <i>Multimedia Tools and Applications</i> , 2019, 78, 33435-33455.  | 2.6 | 4         |
| 27 | A comprehensive survey of arabic sentiment analysis. <i>Information Processing and Management</i> , 2019, 56, 320-342.  | 5.4 | 121       |
| 28 | Toward a new approach for sorting extremely large data files in the big data era. <i>Cluster Computing</i> , 2019, 22, 819-828.   | 3.5 | 6         |
| 29 | Improving the performance of the needleman-wunsch algorithm using parallelization and vectorization techniques. <i>Multimedia Tools and Applications</i> , 2019, 78, 3961-3977.   | 2.6 | 30        |
| 30 | Impact of digital fingerprint image quality on the fingerprint recognition accuracy. <i>Multimedia Tools and Applications</i> , 2019, 78, 3649-3688.  | 2.6 | 150       |
| 31 | Improving fuzzy C-mean-based community detection in social networks using dynamic parallelism. <i>Computers and Electrical Engineering</i> , 2019, 74, 533-546.   | 3.0 | 21        |
| 32 | Enhancing Aspect-Based Sentiment Analysis of Arabic Hotels's™ reviews using morphological, syntactic and semantic features. <i>Information Processing and Management</i> , 2019, 56, 308-319.                           | 5.4 | 121       |
| 33 | Using long short-term memory deep neural networks for aspect-based sentiment analysis of Arabic reviews. <i>International Journal of Machine Learning and Cybernetics</i> , 2019, 10, 2163-2175.                        | 2.3 | 151       |
| 34 | GPU parallelization of sequence segmentation using information theoretic models. <i>Simulation Modelling Practice and Theory</i> , 2018, 86, 11-24.   | 2.2 | 6         |
| 35 | Accelerating 3D medical volume segmentation using GPUs. <i>Multimedia Tools and Applications</i> , 2018, 77, 4939-4958.   | 2.6 | 59        |
| 36 | Leveraging fog computing and software defined systems for selective forwarding attacks detection in mobile wireless sensor networks. <i>Transactions on Emerging Telecommunications Technologies</i> , 2018, 29, e3183. | 2.6 | 26        |

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|----|--|-----|-----------|
| 37 | Studying the controversy in online crowdsâ€™ interactions. Applied Soft Computing Journal, 2018, 66, 557-563.  | 4.1 | 19        |
| 38 | An extended study of collaboration networks of Levantine biomedical researchers. Journal of Ambient Intelligence and Humanized Computing, 2018, 9, 3-18.   | 3.3 | 4         |
| 39 | Resilient service provisioning in cloud based data centers. Future Generation Computer Systems, 2018, 86, 765-774.   | 4.9 | 13        |
| 40 | Collusion attacks mitigation in internet of things: a fog based model. Multimedia Tools and Applications, 2018, 77, 18249-18268.   | 2.6 | 37        |
| 41 | Deep learning for Arabic NLP: A survey. Journal of Computational Science, 2018, 26, 522-531.   | 1.5 | 99        |
| 42 | Deep Recurrent neural network vs. support vector machine for aspect-based sentiment analysis of Arabic hotelsâ€™ reviews. Journal of Computational Science, 2018, 27, 386-393.                       | 1.5 | 227       |
| 43 | Plant Classification in the Wild: A Transfer Learning Approach. , 2018, , .  |     | 3         |
| 44 | Determine Bipolar Disorder Level from Patient Interviews Using Bi-LSTM and Feature Fusion. , 2018, , .   |     | 6         |
| 45 | 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        |
| 46 | Fast exact sequence alignment using parallel computing. , 2018, , .  |     | 1         |
| 47 | Measuring user influence in a co-reviewer network. , 2018, , .   |     | 5         |
| 48 | Identifying influential positively perceived users in co-purchase networks. , 2018, , .  |     | 3         |
| 49 | Cooperative mobile edge computing system for VANET-based software-defined content delivery. Computers and Electrical Engineering, 2018, 71, 388-397.   | 3.0 | 29        |
| 50 | MedGraph: a graph-based representation and computation to handle large sets of images. Multimedia Tools and Applications, 2017, 76, 2769-2785.   | 2.6 | 4         |
| 51 | A novel framework for software defined based secure storage systems. Simulation Modelling Practice and Theory, 2017, 77, 407-423.  | 2.2 | 5         |
| 52 | 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        |
| 53 | An extensive study of authorship authentication of Arabic articles. International Journal of Web Information Systems, 2017, 13, 85-104.  | 1.3 | 14        |
| 54 | Feature extraction and selection for Arabic tweets authorship authentication. Journal of Ambient Intelligence and Humanized Computing, 2017, 8, 383-393.   | 3.3 | 26        |

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|----|--|-----|-----------|
| 55 | Collusion attacks in Internet of Things: Detection and mitigation using a fog based model. , 2017, , .   |     | 15        |
| 56 | Accelerating Levenshtein and Damerau edit distance algorithms using GPU with unified memory. , 2017, , .   |     | 10        |
| 57 | A hybrid CPU-GPU implementation to accelerate multiple pairwise protein sequence alignment. , 2017, , .  |     | 9         |
| 58 | MUMBA: Multi-unit multi-broker auctions for CRNs. , 2017, , .  |     | 0         |
| 59 | Author gender identification from Arabic text. Journal of Information Security and Applications, 2017, 35, 85-95.  | 1.8 | 25        |
| 60 | Delay-aware power optimization model for mobile edge computing systems. Personal and Ubiquitous Computing, 2017, 21, 1067-1077.  | 1.9 | 24        |
| 61 | Software-Defined System Support for Enabling Ubiquitous Mobile Edge Computing. Computer Journal, 2017, 60, 1443-1457.  | 1.5 | 44        |
| 62 | Enhanced 3D segmentation techniques for reconstructed 3D medical volumes: Robust and Accurate Intelligent System. Procedia Computer Science, 2017, 113, 531-538.   | 1.2 | 44        |
| 63 | Accelerating compute-intensive image segmentation algorithms using GPUs. Journal of Supercomputing, 2017, 73, 1929-1951.   | 2.4 | 18        |
| 64 | 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         |
| 65 | Accelerating compute intensive medical imaging segmentation algorithms using hybrid CPU-GPU implementations. Multimedia Tools and Applications, 2017, 76, 3537-3555.   | 2.6 | 64        |
| 66 | Building an Image Database for Studying Image Retargeting. , 2017, , .   |     | 1         |
| 67 | Using Logistic Regression to Improve Virtual Machines Management in Cloud Computing Systems. , 2017, , .   |     | 9         |
| 68 | 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        |
| 69 | Exploiting GPUs to accelerate clustering algorithms. , 2016, , .   |     | 5         |
| 70 | A GPU-based breast cancer detection system using Single Pass Fuzzy C-Means clustering algorithm. , 2016, , .   |     | 25        |
| 71 | Using the Panama Papers to explore the financial networks of the Middle East. , 2016, , .  |     | 11        |
| 72 | A Fog Computing Based System for Selective Forwarding Detection in Mobile Wireless Sensor Networks. , 2016, , .  |     | 44        |

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|----|--|-----|-----------|
| 73 | Leveraging Software-Defined-Networking for Energy Optimisation in Mobile-Cloud-Computing. Procedia Computer Science, 2016, 94, 479-484.                      | 1.2 | 3         |
| 74 | Using GPUs to speed-up FCM-based community detection in Social Networks. , 2016, , .   |     | 13        |
| 75 | Power Optimization of Large Scale Mobile Cloud System Using Cooperative Cloudlets. , 2016, , .   |     | 3         |
| 76 | SDCache: Software Defined Data Caching Control for Cloud Services. , 2016, , .   |     | 2         |
| 77 | Using Dynamic Parallelism to Speed Up Clustering-Based Community Detection in Social Networks. , 2016, , .   |     | 11        |
| 78 | Parallel implementation of FCM-based volume segmentation of 3D images. , 2016, , .   |     | 10        |
| 79 | A compression-based technique to classify metamorphic malware. , 2016, , .   |     | 4         |
| 80 | On the road to the Internet of Biometric Things: A survey of fingerprint acquisition technologies and fingerprint databases. , 2016, , .                     |     | 8         |
| 81 | Using GPUs to speed-up Levenshtein edit distance computation. , 2016, , .  |     | 7         |
| 82 | Virtualization-based Cognitive Radio Networks. Journal of Systems and Software, 2016, 117, 15-29.  | 3.3 | 6         |
| 83 | Cloud support for large scale e-healthcare systems. Annales Des Telecommunications/Annals of Telecommunications, 2016, 71, 503-515.                          | 1.6 | 31        |
| 84 | Software defined cloud: Survey, system and evaluation. Future Generation Computer Systems, 2016, 58, 56-74.  | 4.9 | 98        |
| 85 | SemEval-2016 Task 5: Aspect Based Sentiment Analysis. , 2016, , .  |     | 705       |
| 86 | Software Defined based smart grid architecture. , 2015, , .  |     | 8         |
| 87 | Emotion analysis of Arabic articles and its impact on identifying the author's gender. , 2015, , .   |     | 23        |
| 88 | Evaluating map reduce tasks scheduling algorithms over cloud computing infrastructure. Concurrency Computation Practice and Experience, 2015, 27, 5686-5699. | 1.4 | 15        |
| 89 | Software Defined Cognitive Radio Network Framework. International Journal of Grid and High Performance Computing, 2015, 7, 15-31.                            | 0.7 | 11        |
| 90 | Computer-aided diagnosis of lumbar disc herniation. , 2015, , .  |     | 17        |

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|-----|--|-----|-----------|
| 91  | Automatic Arabic text categorization: A comprehensive comparative study. Journal of Information Science, 2015, 41, 114-124.                                      | 2.0 | 56        |
| 92  | SDIoT: a software defined based internet of things framework. Journal of Ambient Intelligence and Humanized Computing, 2015, 6, 453-461.                         | 3.3 | 159       |
| 93  | Improving FCM and T2FCM algorithms performance using GPUs for medical images segmentation. , 2015, , .   |     | 20        |
| 94  | A GPU-based implementations of the fuzzy C-means algorithms for medical image segmentation. Journal of Supercomputing, 2015, 71, 3149-3162.                      | 2.4 | 47        |
| 95  | Multi-agent based dynamic resource provisioning and monitoring for cloud computing systems infrastructure. Cluster Computing, 2015, 18, 919-932.                 | 3.5 | 89        |
| 96  | Power Optimization of Large Scale Mobile Cloud Computing Systems. , 2015, , .  |     | 25        |
| 97  | The Internet of Energy: Smart Sensor Networks and Big Data Management for Smart Grid. Procedia Computer Science, 2015, 56, 592-597.                              | 1.2 | 168       |
| 98  | SDStorage: A Software Defined Storage Experimental Framework. , 2015, , .  |     | 51        |
| 99  | SDSecurity: A Software Defined Security experimental framework. , 2015, , .  |     | 32        |
| 100 | SDDC: A Software Defined Datacenter Experimental Framework. , 2015, , .  |     | 34        |
| 101 | A hierarchical optimization model for energy data flow in smart grid power systems. Information Systems, 2015, 53, 190-200.                                      | 2.4 | 34        |
| 102 | On authorship authentication of Arabic articles. , 2014, , .   |     | 25        |
| 103 | To Build or Not to Build? Addressing the Expansion Strategies of Cloud Providers. , 2014, , .  |     | 11        |
| 104 | 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        |
| 105 | Collaboration Networks of Levantine Biomedical Researchers. , 2014, , .  |     | 4         |
| 106 | Integration of renewable energy in demand-side management for home appliances. , 2014, , .   |     | 24        |
| 107 | An extensive study of the Bag-of-Words approach for gender identification of Arabic articles. , 2014, , .  |     | 24        |
| 108 | CloudExp: A comprehensive cloud computing experimental framework. Simulation Modelling Practice and Theory, 2014, 49, 180-192.                                   | 2.2 | 81        |

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|-----|--|-----|-----------|
| 109 | Arabic sentiment analysis: Lexicon-based and corpus-based. , 2013, , .   |     | 176       |
| 110 | Machine learning approach for brain tumor detection. , 2012, , .   |     | 28        |
| 111 | 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        |
| 112 | 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         |
| 113 | Social Network Analysis of the Panama Papers Concentrating on the MENA Region. Computer Journal, 0, , .  | 1.5 | 0         |