Mahmood Fathy

List of Publications by Year
in descending order

121 papers	3,644 citations	430874 18 h-index	223800 46 g-index
121 all docs	121 docs citations	121 times ranked	3138 citing authors

#	Article	IF	Citations
1	Notice of Violation of IEEE Publication Principles: An Energy-Efficient Heterogeneous Memory Architecture for Future Dark Silicon Embedded Chip-Multiprocessors. IEEE Transactions on Emerging Topics in Computing, 2024, , 1-1.	4.6	6
2	An Evolutionary Game Approach to Safety-Aware Speed Recommendation in Fog/Cloud-Based Intelligent Transportation Systems. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 7431-7440.	8.0	7
3	Switching Structured Prediction for Simple and Complex Human Activity Recognition. IEEE Transactions on Cybernetics, 2021, 51, 5859-5870.	9.5	13
4	Skeleton-based structured early activity prediction. Multimedia Tools and Applications, 2021, 80, 23023-23049.	3.9	5
5	Deep End-to-End One-Class Classifier. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 675-684.	11.3	48
6	Improving the learning of self-driving vehicles based on real driving behavior using deep neural network techniques. Journal of Supercomputing, 2021, 77, 3752-3794.	3.6	14
7	The improvement in obstacle detection in autonomous vehicles using YOLO non-maximum suppression fuzzy algorithm. Journal of Supercomputing, 2021, 77, 13421-13446.	3.6	23
8	A systematic literature review of vehicle speed assistance in intelligent transportation system. IET Intelligent Transport Systems, 2021, 15, 973-986.	3.0	13
9	Deep-HR: Fast heart rate estimation from face video under realistic conditions. Expert Systems With Applications, 2021, 186, 115596.	7.6	23
10	Driving Violation Detection Using Vehicle Data and Environmental Conditions. , 2021, , .		1
11	Developing and Evaluating A Real time and Energy Efficient Architecture for An Internet of Health Things. , 2020, , .		2
12	Driver behavior detection and classification using deep convolutional neural networks. Expert Systems With Applications, 2020, 149, 113240.	7.6	172
13	Attention Deeplabv3+: Multi-level Context Attention Mechanism for Skin Lesion Segmentation. Lecture Notes in Computer Science, 2020, , 251-266.	1.3	34
14	A hierarchical, scalable architecture for a real-time monitoring system for an electrocardiography, using context-aware computing. Journal of Biomedical Informatics, 2019, 96, 103251.	4.3	14
15	An Energy-Efficient Reliable Heterogeneous Uncore Architecture for Future 3D Chip-Multiprocessors. Journal of Circuits, Systems and Computers, 2019, 28, 1950224.	1.5	2
16	Bi-Directional ConvLSTM U-Net with Densley Connected Convolutions. , 2019, , .		209
17	AVID: Adversarial Visual Irregularity Detection. Lecture Notes in Computer Science, 2019, , 488-505.	1.3	29
18	Generative Adversarial Irregularity Detection in Mammography Images. Lecture Notes in Computer Science, 2019, , 94-104.	1.3	3

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19	Deep-anomaly: Fully convolutional neural network for fast anomaly detection in crowded scenes. Computer Vision and Image Understanding, 2018, 172, 88-97.	4.7	300
20	ECCN: an extended CCN architecture to improve data access in vehicular content-centric network. Journal of Supercomputing, 2018, 74, 205-221.	3.6	28
21	An energy-efficient 3D-stacked STT-RAM cache architecture for cloud processors: the effect on emerging scale-out workloads. Journal of Supercomputing, 2018, 74, 1547-1561.	3.6	4
22	Adversarially Learned One-Class Classifier for Novelty Detection. , 2018, , .		419
23	Low-power heterogeneous uncore architecture for future 3D chip-multiprocessors. ETRI Journal, 2018, 40, 759-773.	2.0	5
24	A method to predict travel time in large-scale urban areas using Vehicular Networks. , 2018, , .		2
25	NIZCache: Energy-efficient Non-uniform Cache Architecture for Chip-multiprocessors Based on Invalid and Zero Lines. , 2018, , .		0
26	Optimization-based reconfigurable approach for low-power 3D chip-multiprocessors. , 2018, , .		1
27	Deep-Cascade: Cascading 3D Deep Neural Networks for Fast Anomaly Detection and Localization in Crowded Scenes. IEEE Transactions on Image Processing, 2017, 26, 1992-2004.	9.8	267
28	An energy efficient non-uniform Last Level Cache Architecture in 3D chip-multiprocessors. , 2017, , .		6
29	Optimization-based power and thermal management for dark silicon aware 3D chip multiprocessors using heterogeneous cache hierarchy. Microprocessors and Microsystems, 2017, 51, 76-98.	2.8	17
30	Exploiting non-uniformity of write accesses for designing a high-endurance hybrid Last Level Cache in 3D CMPs. , 2017, , .		5
31	A new traffic compression method for end-to-end memory accesses in 3D chip-multiprocessors. , 2017, , .		1
32	STFCN: Spatio-Temporal Fully Convolutional Neural Network for Semantic Segmentation of Street Scenes. Lecture Notes in Computer Science, 2017, , 493-509.	1.3	16
33	Fast and accurate detection and localization of abnormal behavior in crowded scenes. Machine Vision and Applications, 2017, 28, 965-985.	2.7	18
34	Energy aware and reliable STT-RAM based cache design for 3D embedded chip-multiprocessors. , 2017, , .		5
35	Structured prediction with short/long-range dependencies for human activity recognition from depth skeleton data. , 2017, , .		7
36	Reliability and Power Optimization in 3D-Stacked Cache Using a Run-Time Reconfiguration Procedure. , 2017, , .		0

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37	Optimal Placement of Heterogeneous Uncore Component in 3D Chip-Multiprocessors. , 2017, , .		1
38	Power Modeling and Runtime Performance Optimization of Power Limited Many-Core Systems Based on a Dynamic Adaptive Approach. Journal of Low Power Electronics, 2017, 13, 166-195.	0.6	0
39	A probabilistic graphical model approach for human activity recognition using skeleton data. , 2016, , .		1
40	Facial expression recognition with discriminatory graphical models. , 2016, , .		4
41	High performance 3D CMP design with stacked hybrid memory architecture in the dark silicon era using a convex optimization model. , 2016, , .		1
42	An improved scheme for pre-computed patterns in core-based SoC architecture. , 2016, , .		3
43	Video anomaly detection and localisation based on the sparsity and reconstruction error of autoâ€encoder. Electronics Letters, 2016, 52, 1122-1124.	1.0	130
44	Notice of Violation of IEEE Publication Principles: A heterogeneous memory organization with minimum energy consumption in 3D chip-multiprocessors. , 2016, , .		0
45	OptMem: Dark-silicon aware low latency hybrid memory design. , 2016, , .		2
46	UCA. , 2016, , .		3
47	Identifying functional cancer-specific miRNAâ€"mRNA interactions in testicular germ cell tumor. Journal of Theoretical Biology, 2016, 404, 82-96.	1.7	7
48	An efficient infrastructure based service discovery in vehicular networks using P2P structures. Journal of Supercomputing, 2016, 72, 1013-1034.	3.6	17
49	Reduction of Power Consumption in Cloud Data Centers via Dynamic Migration of Virtual Machines. International Journal of Information and Education Technology, 2016, 6, 286-290.	1.2	4
50	A high-performance hybrid memory architecture for embedded CMPs using a convex optimization model. , 2015, , .		0
51	A Content Sharing and Discovery Framework Based on Semantic and Geographic Partitioning for Vehicular Networks. Wireless Personal Communications, 2015, 85, 1583-1616.	2.7	3
52	A novel approach for Finger Vein verification based on self-taught learning. , 2015, , .		9
53	Lighting the Dark-Silicon 3D Chip Multi-processors by Exploiting Heterogeneity in Cache Hierarchy. , 2015, , .		0
54	Exploiting Heterogeneity in Cache Hierarchy in Dark-Silicon 3D Chip Multi-processors. , 2015, , .		4

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55	Optimal road side units placement model based on binary integer programming for efficient traffic information advertisement and discovery in vehicular environment. IET Intelligent Transport Systems, 2015, 9, 851-861.	3.0	22
56	Real-time anomaly detection and localization in crowded scenes. , 2015, , .		129
57	Hybrid stacked memory architecture for energy efficient embedded chip-multiprocessors based on compiler directed approach. , 2015, , .		1
58	Non-negative matrix completion for action detection. Image and Vision Computing, 2015, 39, 38-51.	4.5	14
59	An effective algorithm for fingerprint reference point detection based on filed flow curves. , 2015, , .		1
60	Alignment-free fingerprint cryptosystem based on multiple fuzzy vaults. , 2015, , .		5
61	Improving logic function synthesis, through wire crossing reduction in quantum€dot cellular automata layout. IET Circuits, Devices and Systems, 2015, 9, 265-274.	1.4	8
62	Energy efficient 3D Hybrid processor-memory architecture for the dark silicon age. , 2015, , .		7
63	Multi-label Discriminative Weakly-Supervised Human Activity Recognition and Localization. Lecture Notes in Computer Science, 2015, , 241-258.	1.3	8
64	An Optimized Two-Purpose Peer-to-Peer VANET to Disseminate Traffic Information and Reduce Travel Time. International Journal of Future Computer and Communication, 2015, 4, 1-6.	1.3	1
65	A Graph-based Model for RSUs Deployment in Vehicular Networks by Considering Urban and Network Limitations and QoS Requirements of Service Advertisement and Discovery. KSII Transactions on Internet and Information Systems, 2015, 9, .	0.3	0
66	A Review on Driver Face Monitoring Systems for Fatigue and Distraction Detection. International Journal of Advanced Science and Technology, 2014, 64, 73-100.	0.3	75
67	A two-purpose peer-to-peer structure for vehicle navigating and traffic information disseminating in vehicular networks. , 2014, , .		2
68	Distributed matrix completion for large-scale multi-label classification. Intelligent Data Analysis, 2014, 18, 1137-1151.	0.9	2
69	A probabilistic approach for video stabilisation in compressed domain. Imaging Science Journal, 2014, 62, 197-205.	0.5	0
70	Informative visual words construction to improve bag of words image representation. IET Image Processing, 2014, 8, 310-318.	2.5	7
71	The impact of mobility models on the performance of P2P content discovery protocols over mobile ad hoc networks. Peer-to-Peer Networking and Applications, 2014, 7, 66-85.	3.9	6
72	Performance Analysis and Improvement Content Discovery Protocols Over Vehicular Networks. Wireless Personal Communications, 2014, 75, 857-899.	2.7	2

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73	Modeling and optimizing Random Walk content discovery protocol over mobile ad-hoc networks. Performance Evaluation, 2014, 74, 18-29.	1.2	11
74	An Iranian License Plate Recognition System Based on Color Features. IEEE Transactions on Intelligent Transportation Systems, 2014, 15, 1690-1705.	8.0	132
75	Extracting a cancer model by enhanced ant colony optimisation algorithm. International Journal of Data Mining and Bioinformatics, 2014, 10, 83.	0.1	1
76	Mobile target tracking in non-overlapping wireless visual sensor Networks using Neural Networks. , 2013, , .		2
77	Online failure detection and correction for CAMShift tracking algorithm. , 2013, , .		7
78	Multi-View Human Activity Recognition in Distributed Camera Sensor Networks. Sensors, 2013, 13, 8750-8770.	3.8	24
79	A Driver Face Monitoring System for Fatigue and Distraction Detection. International Journal of Vehicular Technology, 2013, 2013, 1-11.	1.1	106
80	Improving QoS in VANET Using MPLS. Procedia Computer Science, 2012, 10, 1018-1025.	2.0	17
81	Improving the availability of P2P-based network management systems by provisioning fault tolerance property. Journal of Supercomputing, 2012, 61, 912-934.	3.6	0
82	Image inpainting with prioritizing of hole's pixels. , 2012, , .		0
83	Planning VANET infrastructures to improve safety awareness in curved roads. Journal of Zhejiang University: Science C, 2012, 13, 918-928.	0.7	2
84	Impact of Mobility on Performance of P2P Content Discovery Protocols Over MANET. Procedia Computer Science, 2012, 10, 642-649.	2.0	6
85	BILBO-friendly hybrid BIST architecture with asymmetric polynomial reseeding. , 2012, , .		5
86	Robust watermarking scheme based on RDWT-SVD: Embedding data in all subbands. , 2011, , .		33
87	Using spatial correlations in distributed video coding. , 2011, , .		1
88	Object Tracking Using Improved CAMShift Algorithm Combined with Motion Segmentation. , 2011, , .		22
89	AVLR-EBP: A Variable Step Size Approach to Speed-up the Convergence of Error Back-Propagation Algorithm. Neural Processing Letters, 2011, 33, 201-214.	3.2	10
90	Adaptive end-to-end QoS for multimedia over heterogeneous wireless networks. Computers and Electrical Engineering, 2010, 36, 45-55.	4.8	17

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91	A Two Level Architecture for High Throughput DCT-Processor and Implementing on FPGA. , 2010, , .		5
92	A new low cost fault tolerant solution for mesh based NoCs. , 2010, , .		1
93	Reducing sensors' movement using simple iterative virtual movement. , 2010, , .		0
94	A neighbor-based holdoff reduction scheme for distributed scheduling in wireless mesh networks. , 2010, , .		5
95	Secure Safety Messages Broadcasting in Vehicular Network. , 2009, , .		3
96	Key frames selection into panoramic mosaics. , 2009, , .		5
97	A Predominant Routing for on-chip networks. , 2009, , .		2
98	Regional Varying Image Super-Resolution. , 2009, , .		5
99	Improving coverage in mobile sensor networks using overlap concept. , 2009, , .		2
100	An Enhanced Fault-Tolerant Routing Algorithm for Mesh Network-on-Chip. , 2009, , .		6
101	Improving connectivity in vehicular ad hoc networks: An analytical study. Computer Communications, 2008, 31, 1653-1659.	5.1	71
102	Analytical Model for Connectivity in Vehicular Ad Hoc Networks. IEEE Transactions on Vehicular Technology, 2008, 57, 3341-3356.	6.3	368
103	Enhancing AODV routing protocol using mobility parameters in VANET. , 2008, , .		75
104	A Reliable Method for Disseminating Safety Information in Vehicular Ad Hoc Networks Considering Fragmentation Problem. , 2008, , .		29
105	Wireless TCP-Friendly Rate Control over the DCCP Transport Protocol. , 2008, , .		5
106	A High Performance Parallel IP Lookup Technique Based on Multiprocessor Organization and CREW PRAM. , 2008, , .		0
107	Channel access delay analysis of IEEE 802-16 Best Effort services. , 2008, , .		1
108	Optimized Routing Based on Mobility Prediction in Wireless Mobile Adhoc Networks for Urban Area. , 2008, , .		14

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109	Reliable NoC architecture utilizing a robust rerouting algorithm. , 2008, , .		4
110	Availability measurement in peer to peer network management systems. , 2008, , .		0
111	METRICS FOR PERFORMANCE EVALUATION OF SAFETY APPLICATIONS IN VEHICULAR AD HOC NETWORKS. Transport, 2008, 23, 291-298.	1.2	30
112	A similarity-window based background estimation approach. , 2008, , .		0
113	AIMD-TCP-Friendly Rate Control Over Wireless Networks. , 2008, , .		1
114	Pedestrian Detection from a Moving Camera with an Advanced Camera-Motion Estimator. , 2007, , .		2
115	QR Decomposition-Based Algorithm for Background Subtraction. , 2007, , .		5
116	A low-cost strong shadow-based segmentation approach for vehicle tracking in congested traffic scenes. , 2007, , .		2
117	Connectivity in vehicular ad hoc networks in presence wireless mobile base-stations. , 2007, , .		18
118	Using pattern matching for tiling and packing problems. European Journal of Operational Research, 2007, 183, 950-960.	5.7	6
119	A new compression based approach for reconfiguration overhead reduction in virtex based RTR systems. Computers and Electrical Engineering, 2006, 32, 322-347.	4.8	4
120	Vehicular Ad Hoc Networks (VANETs): Challenges and Perspectives. , 2006, , .		380
121	Design of New Scheduling Algorithm for Ad hoc Networks with Capability of Differential Service. , 2006, , .		1