Ajmal S Mian

List of Publications by Year
in descending order

170 papers	7,961 citations	81839 39 h-index	66879 78 g-index
172 all docs	172 docs citations	172 times ranked	6535 citing authors

#	Article	IF	Citations
1	Threat of Adversarial Attacks on Deep Learning in Computer Vision: A Survey. IEEE Access, 2018, 6, 14410-14430.	2.6	1,225
2	Three-Dimensional Model-Based Object Recognition and Segmentation in Cluttered Scenes. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2006, 28, 1584-1601.	9.7	420
3	An Efficient Multimodal 2D-3D Hybrid Approach to Automatic Face Recognition. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2007, 29, 1927-1943.	9.7	394
4	Keypoint Detection and Local Feature Matching for Textured 3D Face Recognition. International Journal of Computer Vision, 2008, 79, 1-12.	10.9	212
5	Face Recognition Using Sparse Approximated Nearest Points between Image Sets. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2012, 34, 1992-2004.	9.7	167
6	Sparse approximated nearest points for image set classification. , 2011, , .		164
7	Automatic fish species classification in underwater videos: exploiting pre-trained deep neural network models to compensate for limited labelled data. ICES Journal of Marine Science, 2018, 75, 374-389.	1.2	163
8	Deep Affinity Network for Multiple Object Tracking. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2019, 43, 1-1.	9.7	159
9	Using Kinect for face recognition under varying poses, expressions, illumination and disguise. , 2013, , .		155
10	Fish species classification in unconstrained underwater environments based on deep learning. Limnology and Oceanography: Methods, 2016, 14, 570-585.	1.0	146
11	Learning a Deep Model for Human Action Recognition from Novel Viewpoints. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 667-681.	9.7	146
12	Prenatal testosterone exposure is related to sexually dimorphic facial morphology in adulthood. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20151351.	1.2	138
13	Histogram of Oriented Principal Components for Cross-View Action Recognition. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2016, 38, 2430-2443.	9.7	135
14	Hyperspectral Face Recognition With Spatiospectral Information Fusion and PLS Regression. IEEE Transactions on Image Processing, 2015, 24, 1127-1137.	6.0	130
15	Fish detection and species classification in underwater environments using deep learning with temporal information. Ecological Informatics, 2020, 57, 101088.	2.3	130
16	Automatic fish detection in underwater videos by a deep neural network-based hybrid motion learning system. ICES Journal of Marine Science, 2020, 77, 1295-1307.	1.2	115
17	3D Action Recognition from Novel Viewpoints. , 2016, , .		114
18	Spatially Optimized Data-Level Fusion of Texture and Shape for Face Recognition. IEEE Transactions on Image Processing, 2012, 21, 859-872.	6.0	111

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19	Target-aware Holistic Influence Maximization in Spatial Social Networks. IEEE Transactions on Knowledge and Data Engineering, 2020, , 1-1.	4.0	111
20	Defense Against Universal Adversarial Perturbations. , 2018, , .		105
21	A training-free nose tip detection method from face range images. Pattern Recognition, 2011, 44, 544-558.	5.1	101
22	Video Description. ACM Computing Surveys, 2020, 52, 1-37.	16.1	100
23	Spherical Kernel for Efficient Graph Convolution on 3D Point Clouds. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 3664-3680.	9.7	97
24	Point attention network for semantic segmentation of 3D point clouds. Pattern Recognition, 2020, 107, 107446.	5.1	94
25	Learning a non-linear knowledge transfer model for cross-view action recognition. , 2015, , .		92
26	Advances in Adversarial Attacks and Defenses in Computer Vision: A Survey. IEEE Access, 2021, 9, 155161-155196.	2.6	91
27	Octree Guided CNN With Spherical Kernels for 3D Point Clouds. , 2019, , .		83
28	Real time action recognition using histograms of depth gradients and random decision forests. , 2014, , .		78
29	Efficient Detection and Recognition of 3D Ears. International Journal of Computer Vision, 2011, 95, 52-73.	10.9	77
30	Recent Advances on Singlemodal and Multimodal Face Recognition: A Survey. IEEE Transactions on Human-Machine Systems, 2014, 44, 701-716.	2.5	73
31	Efficient classification with sparsity augmented collaborative representation. Pattern Recognition, 2017, 65, 136-145.	5.1	73
32	Multidimensional Ground Reaction Forces and Moments From Wearable Sensor Accelerations via Deep Learning. IEEE Transactions on Biomedical Engineering, 2021, 68, 289-297.	2.5	63
33	Automatic 3D Face Detection, Normalization and Recognition. , 2006, , .		62
34	Dense 3D Face Correspondence. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 1584-1598.	9.7	61
35	Predicting athlete ground reaction forces and moments from motion capture. Medical and Biological Engineering and Computing, 2018, 56, 1781-1792.	1.6	59
36	Automatic ink mismatch detection for forensic document analysis. Pattern Recognition, 2015, 48, 3615-3626.	5.1	57

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37	Hyperspectral Recovery from RGB Images using Gaussian Processes. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 100-113.	9.7	56
38	Joint Group Sparse PCA for Compressed Hyperspectral Imaging. IEEE Transactions on Image Processing, 2015, 24, 4934-4942.	6.0	54
39	Contour Code: Robust and efficient multispectral palmprint encoding for human recognition. , 2011, , .		53
40	Predicting Athlete Ground Reaction Forces and Moments From Spatio-Temporal Driven CNN Models. IEEE Transactions on Biomedical Engineering, 2019, 66, 689-694.	2.5	53
41	Fish identification from videos captured in uncontrolled underwater environments. ICES Journal of Marine Science, 2016, 73, 2737-2746.	1.2	52
42	Deep, dense and accurate 3D face correspondence for generating population specific deformable models. Pattern Recognition, 2017, 69, 238-250.	5.1	51
43	Blind Domain Adaptation With Augmented Extreme Learning Machine Features. IEEE Transactions on Cybernetics, 2017, 47, 651-660.	6.2	50
44	Learning from Millions of 3D Scans for Large-Scale 3D Face Recognition. , 2018, , .		49
45	Benchmark Data and Method for Real-Time People Counting in Cluttered Scenes Using Depth Sensors. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 3599-3612.	4.7	49
46	Small Object Augmentation of Urban Scenes for Real-Time Semantic Segmentation. IEEE Transactions on Image Processing, 2020, 29, 5175-5190.	6.0	44
47	A review of techniques for the identification and measurement of fish in underwater stereo-video image sequences. Proceedings of SPIE, 2013, , .	0.8	43
48	Image Set Based Face Recognition Using Self-Regularized Non-Negative Coding and Adaptive Distance Metric Learning. IEEE Transactions on Image Processing, 2013, 22, 5252-5262.	6.0	43
49	A Comparison of Three Neural Network Approaches for Estimating Joint Angles and Moments from Inertial Measurement Units. Sensors, 2021, 21, 4535.	2.1	43
50	Automated Fish Detection in Underwater Images Using Shapeâ€Based Level Sets. Photogrammetric Record, 2015, 30, 46-62.	0.4	41
51	Discriminative Bayesian Dictionary Learning for Classification. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2016, 38, 2374-2388.	9.7	41
52	Relation Graph Network for 3D Object Detection in Point Clouds. IEEE Transactions on Image Processing, 2021, 30, 92-107.	6.0	40
53	Hyperspectral Imaging for Ink Mismatch Detection. , 2013, , .		38
54	Nonparametric Coupled Bayesian Dictionary and Classifier Learning for Hyperspectral Classification. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 4038-4050.	7.2	38

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55	On-field player workload exposure and knee injury risk monitoring via deep learning. Journal of Biomechanics, 2019, 93, 185-193.	0.9	36
56	Representation learning with deep extreme learning machines for efficient image set classification. Neural Computing and Applications, 2018, 30, 1211-1223.	3.2	34
57	Discriminative human action classification using locality-constrained linear coding. Pattern Recognition Letters, 2016, 72, 62-71.	2.6	33
58	Towards automating underwater measurement of fish length: a comparison of semi-automatic and manual stereo–video measurements. ICES Journal of Marine Science, 2017, 74, 1690-1701.	1.2	33
59	Progress in the Automated Identification, Measurement, and Counting of Fish in Underwater Image Sequences. Marine Technology Society Journal, 2016, 50, 4-16.	0.3	32
60	On farm automatic sheep breed classification using deep learning. Computers and Electronics in Agriculture, 2019, 167, 105055.	3.7	32
61	Semi-supervised Spectral Clustering for Image Set Classification. , 2014, , .		31
62	Localized forgery detection in hyperspectral document images. , 2015, , .		31
63	Benchmark Data Set and Method for Depth Estimation From Light Field Images. IEEE Transactions on Image Processing, 2018, 27, 3586-3598.	6.0	31
64	Using hyperspectral imaging to characterize consistency of coffee brands and their respective roasting classes. Journal of Food Engineering, 2016, 190, 34-39.	2.7	30
65	Hierarchical Beta Process with Gaussian Process Prior for Hyperspectral Image Super Resolution. Lecture Notes in Computer Science, 2016, , 103-120.	1.0	29
66	Hypermasculinised facial morphology in boys and girls with Autism Spectrum Disorder and its association with symptomatology. Scientific Reports, 2017, 7, 9348.	1.6	28
67	Predicting sleep apnea from three-dimensional face photography. Journal of Clinical Sleep Medicine, 2020, 16, 493-502.	1.4	28
68	Hyperspectral video restoration using optical flow and sparse coding. Optics Express, 2012, 20, 10658.	1.7	27
69	Futuristic Greedy Approach to Sparse Unmixing of Hyperspectral Data. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 2157-2174.	2.7	27
70	Periocular region-based person identification in the visible, infrared and hyperspectral imagery. Neurocomputing, 2015, 149, 854-867.	3.5	26
71	Self-Supervised Learning to Detect Key Frames in Videos. Sensors, 2020, 20, 6941.	2.1	26
72	RCMF: Robust Constrained Matrix Factorization for Hyperspectral Unmixing. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 3354-3366.	2.7	25

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73	Joint Discriminative Bayesian Dictionary and Classifier Learning. , 2017, , .		25
74	Convolutional hypercube pyramid for accurate RGB-D object category and instance recognition. , 2016, , .		24
75	Geometric Facial Gender Scoring: Objectivity of Perception. PLoS ONE, 2014, 9, e99483.	1.1	24
76	Illumination invariant recognition and 3D reconstruction of faces using desktop optics. Optics Express, 2011, 19, 7491.	1.7	23
77	Adversarial Attack on Skeleton-Based Human Action Recognition. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 1609-1622.	7.2	23
78	CAMERAS: Enhanced Resolution And Sanity preserving Class Activation Mapping for image saliency. , 2021, , .		23
79	Online learning from local features for video-based face recognition. Pattern Recognition, 2011, 44, 1068-1075.	5.1	21
80	Is spectral reflectance of the face a reliable biometric?. Optics Express, 2015, 23, 15160.	1.7	21
81	Dynamic Texture Comparison Using Derivative Sparse Representation: Application to Video-Based Face Recognition. IEEE Transactions on Human-Machine Systems, 2017, 47, 970-982.	2.5	21
82	Modeling Sub-Event Dynamics in First-Person Action Recognition. , 2017, , .		21
83	3D Face Reconstruction from Light Field Images: A Model-Free Approach. Lecture Notes in Computer Science, 2018, , 508-526.	1.0	21
84	Face recognition based on Kinect. Pattern Analysis and Applications, 2016, 19, 977-987.	3.1	20
85	Realtime face detection and tracking using a single Pan, Tilt, Zoom camera. , 2008, , .		19
86	Action Classification with Locality-Constrained Linear Coding. , 2014, , .		19
87	Accuracy of maxillary repositioning surgery using CAD/CAM customized surgical guides and fixation plates. International Journal of Oral and Maxillofacial Surgery, 2021, 50, 494-500.	0.7	19
88	Realtime Visual Tracking of Aircrafts. , 2008, , .		17
89	Periocular biometric recognition using image sets. , 2013, , .		17
90	Robust RGB-D face recognition using Kinect sensor. Neurocomputing, 2016, 214, 93-108.	3.5	17

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91	Free-form Description Guided 3D Visual Graph Network for Object Grounding in Point Cloud. , 2021, , .		17
92	Sexually dimorphic facial features vary according to level of autistic-like traits in the general population. Journal of Neurodevelopmental Disorders, 2015, 7, 14.	1.5	16
93	Automatic 4D Facial Expression Recognition Using DCT Features. , 2015, , .		16
94	Learning Human Pose Models from Synthesized Data for Robust RGB-D Action Recognition. International Journal of Computer Vision, 2019, 127, 1545-1564.	10.9	16
95	Increased facial asymmetry in autism spectrum conditions is associated with symptom presentation. Autism Research, 2019, 12, 1774-1783.	2.1	16
96	Fast ORB-SLAM Without Keypoint Descriptors. IEEE Transactions on Image Processing, 2022, 31, 1433-1446.	6.0	16
97	SUnGP: A Greedy Sparse Approximation Algorithm for Hyperspectral Unmixing. , 2014, , .		15
98	Learning a deeply supervised multi-modal RGB-D embedding for semantic scene and object category recognition. Robotics and Autonomous Systems, 2017, 92, 41-52.	3.0	15
99	Three-dimensional assessment of facial asymmetry using dense correspondence, symmetry, and midline analysis. American Journal of Orthodontics and Dentofacial Orthopedics, 2020, 158, 134-146.	0.8	15
100	Surface geodesic pattern for 3D deformable texture matching. Pattern Recognition, 2017, 62, 21-32.	5.1	14
101	Unsupervised learning from local features for video-based face recognition. , 2008, , .		13
102	Attack to Fool and Explain Deep Networks. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 5980-5995.	9.7	13
103	2D and 3D Multimodal Hybrid Face Recognition. Lecture Notes in Computer Science, 2006, , 344-355.	1.0	13
104	Towards Large-Scale 3D Face Recognition. , 2016, , .		12
105	Viewpoint invariant semantic object and scene categorization with RGB-D sensors. Autonomous Robots, 2019, 43, 1005-1022.	3.2	12
106	Annotation Tool and Urban Dataset for 3D Point Cloud Semantic Segmentation. IEEE Access, 2021, 9, 35984-35996.	2.6	12
107	Score Level Fusion of Ear and Face Local 3D Features for Fast and Expression-Invariant Human Recognition. Lecture Notes in Computer Science, 2009, , 387-396.	1.0	12
108	Biologically Significant Facial Landmarks: How Significant Are They for Gender Classification?. , 2013, , .		11

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109	Viewpoint Invariant Action Recognition Using RGB-D Videos. IEEE Access, 2018, 6, 70061-70071.	2.6	11
110	Structural Similarity Loss for Learning to Fuse Multi-Focus Images. Sensors, 2020, 20, 6647.	2.1	10
111	A broad autism phenotype expressed in facial morphology. Translational Psychiatry, 2020, 10, 7.	2.4	9
112	Biometric Security Application for Person Authentication Using Retinal Vessel Feature. , 2013, , .		8
113	Quantification of sun-related changes in the eye in conjunctival ultraviolet autofluorescence images. Journal of Medical Imaging, 2016, 3, 034001.	0.8	8
114	Facial Gender Classification â€" Analysis using Convolutional Neural Networks. , 2019, , .		8
115	Attack to Explain Deep Representation. , 2020, , .		8
116	3D Face Recognition. , 2012, , 311-366.		7
117	Localized Deep Extreme Learning Machines for Efficient RGB-D Object Recognition. , 2015, , .		7
118	Modeling 2D Appearance Evolution for 3D Object Categorization. , 2016, , .		7
119	Empirical autopsy of deep video captioning encoder-decoder architecture. Array, 2021, 9, 100052.	2.5	7
120	Illumination Normalization for Color Face Images. Lecture Notes in Computer Science, 2006, , 90-101.	1.0	7
121	Multiview Point Cloud Registration Based on Minimum Potential Energy for Free-Form Blade Measurement. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-14.	2.4	7
122	Shade Face: Multiple image-based 3D face recognition. , 2009, , .		6
123	Facial Self Similarity for Sketch to Photo Matching. , 2012, , .		6
124	Viewpoint Invariant RGB-D Human Action Recognition. , 2017, , .		6
125	DualConv: Dual Convolutional Kernels for Lightweight Deep Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 9528-9535.	7.2	6
126	Correlation based speech-video synchronization. Pattern Recognition Letters, 2011, 32, 780-786.	2.6	5

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127	Biometric authentication system using retinal vessel pattern and geometric hashing. IET Biometrics, 2017, 6, 79-88.	1.6	5
128	Orthogonal Deep Models as Defense Against Black-Box Attacks. IEEE Access, 2020, 8, 119744-119757.	2.6	5
129	Assessing the Capability and Potential of LiDAR for Weed Detection. Sensors, 2021, 21, 2328.	2.1	5
130	Facial asymmetry in parents of children on the autism spectrum. Autism Research, 2021, 14, 2260-2269.	2.1	5
131	Exploiting Structured CNNs for Semantic Segmentation of Unstructured Point Clouds from LiDAR Sensor. Remote Sensing, 2021, 13, 3621.	1.8	5
132	Picasso: A CUDA-based Library for Deep Learning over 3D Meshes. , 2021, , .		5
133	Cross-Domain Modality Fusion for Dense Video Captioning. IEEE Transactions on Artificial Intelligence, 2022, 3, 763-777.	3.4	5
134	Special issue on Advanced Machine Vision. Machine Vision and Applications, 2020, 31, 1.	1.7	4
135	Cassandra: Detecting Trojaned Networks From Adversarial Perturbations. IEEE Access, 2021, 9, 135856-135867.	2.6	4
136	High Definition LiDAR mapping of Perth CBD. , 2021, , .		4
137	Robust realtime feature detection in raw 3D face images. , 2011, , .		3
138	Unsupervised manifold alignment using soft-assign technique. Machine Vision and Applications, 2016, 27, 929-942.	1.7	3
139	Converting a Common Low-Cost Document Scanner into a Multispectral Scanner. Sensors, 2019, 19, 3199.	2.1	3
140	Comparison of crop and weed height, for potential differentiation of weed patches at harvest. Weed Research, 2021, 61, 25-34.	0.8	3
141	Brief Report: Facial Asymmetry and Autistic-Like Traits in the General Population. Journal of Autism and Developmental Disorders, 2021, 51, 2115-2123.	1.7	3
142	Contextualise, Attend, Modulate and Tell: Visual Storytelling. , 2021, , .		3
143	Odyssey: Creation, Analysis and Detection of Trojan Models. IEEE Transactions on Information Forensics and Security, 2021, 16, 4521-4533.	4.5	3
144	Defense-friendly Images in Adversarial Attacks: Dataset and Metrics for Perturbation Difficulty. , 2021, , .		3

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145	Semantic Attribute Enriched Storytelling from a Sequence of Images. , 2021, , .		3
146	Fully Convolutional Network-Based Self-Supervised Learning for Semantic Segmentation. IEEE Transactions on Neural Networks and Learning Systems, 2024, 35, 132-142.	7.2	3
147	Adaptive spectral reflectance recovery using spatio-spectral support from hyperspectral images. , 2014, , .		2
148	Fully automatic 3D facial expression recognition using local depth features. , 2014, , .		2
149	Learning Interpretable Expression-sensitive Features for 3D Dynamic Facial Expression Recognition. , 2019, , .		2
150	Machine learning powered tools for automated analysis of muscle sympathetic nerve activity recordings. Physiological Reports, 2021, 9, e14996.	0.7	2
151	Automatic data extraction from 24 hour blood pressure measurement reports of a large multicenter clinical trial. Computer Methods and Programs in Biomedicine, 2022, 214, 106588.	2.6	2
152	3D face reconstruction from images under arbitrary illumination using Support Vector Regression. , 2010, , .		1
153	Regularized Least-Squares Coding with Unlabeled Dictionary for Image-Set Based Face Recognition. , 2014, , .		1
154	Gradient based efficient feature selection. , 2014, , .		1
155	Assistive Signals for Deep Neural Network Classifiers. , 2021, , .		1
156	Spatially Optimized Data-Level Fusion of Texture and Shape for Face Recognition. , 0, .		1
157	K-means panning â€" Developing a new standard in automated MSNA signal recognition with a weakly supervised learning approach. Computers in Biology and Medicine, 2022, 140, 105087.	3.9	1
158	Deep localization of subcellular protein structures from fluorescence microscopy images. Neural Computing and Applications, 2022, 34, 5701.	3.2	1
159	Autoencoded deep features for semi-automatic, weakly supervised physiological signal labelling. Computers in Biology and Medicine, 2022, 143, 105294.	3.9	1
160	An investigation of a novel broad autism phenotype: increased facial masculinity among parents of children on the autism spectrum. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20220143.	1.2	1
161	Fast Parallel Bayesian Network Structure Learning. , 2022, , .		1
162	Sparse Variation Pattern for Texture Classification. , 2013, , .		0

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163	3D face recognition using topographic high-order derivatives. , 2013, , .		0
164	Guest Editorial: Language in Vision. Computer Vision and Image Understanding, 2017, 163, 1-2.	3.0	0
165	Accuracy of orthognathic surgery using 3D computer-assisted surgical simulation. Australasian Orthodontic Journal, 2018, 34, 17-26.	0.3	0
166	Neural computing and applications (NCAA) special issue on best of DICTA 2019 papers. Neural Computing and Applications, 2021, 33, 7309-7309.	3.2	0
167	Facial soft tissue norms in Caucasians using an innovative three-dimensional approach. Australasian Orthodontic Journal, 2020, 36, 45-54.	0.3	0
168	3D Face Recognition. , 2020, , 569-630.		0
169	Transferable 3D Adversarial Textures using End-to-end Optimization. , 2022, , .		0
170	Attacking Image Classifiers To Generate 3D Textures. , 2021, , .		0