Stephen J Maybank

List of Publications by Year
in descending order

90 papers	7,112 citations	126708 33 h-index	76769 74 g-index
92 all docs	92 docs citations	92 times ranked	4945 citing authors

#	Article	IF	Citations
1	Single Image Haze Removal Based on a Simple Additive Model With Haze Smoothness Prior. IEEE Transactions on Circuits and Systems for Video Technology, 2022, 32, 3490-3499.	5.6	7
2	Bridging Composite and Real: Towards End-to-End Deep Image Matting. International Journal of Computer Vision, 2022, 130, 246-266.	10.9	35
3	Wide-Angle Image Rectification: A Survey. International Journal of Computer Vision, 2022, 130, 747-776.	10.9	7
4	DUT: Learning Video Stabilization by Simply Watching Unstable Videos. IEEE Transactions on Image Processing, 2022, 31, 4306-4320.	6.0	18
5	Learning to Explore Distillability and Sparsability: A Joint Framework for Model Compression. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, , 1-18.	9.7	5
6	Knowledge Distillation: A Survey. International Journal of Computer Vision, 2021, 129, 1789-1819.	10.9	951
7	EDP: An Efficient Decomposition and Pruning Scheme for Convolutional Neural Network Compression. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 4499-4513.	7.2	22
8	Fisher-Rao Metric. , 2021, , 474-476.		0
9	3D-FUTURE: 3D Furniture Shape with TextURE. International Journal of Computer Vision, 2021, 129, 3313-3337.	10.9	45
10	Optical flow estimation using the Fisher–Rao metric. Neuromorphic Computing and Engineering, 2021, 1, 024004.	2.8	1
11	Tracking-by-Fusion via Gaussian Process Regression Extended to Transfer Learning. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 939-955.	9.7	15
12	Anomaly Detection Using Local Kernel Density Estimation and Context-Based Regression. IEEE Transactions on Knowledge and Data Engineering, 2020, 32, 218-233.	4.0	63
13	Dual L1-Normalized Context Aware Tensor Power Iteration and Its Applications to Multi-object Tracking and Multi-graph Matching. International Journal of Computer Vision, 2020, 128, 360-392.	10.9	8
14	Self-Taught Semisupervised Dictionary Learning With Nonnegative Constraint. IEEE Transactions on Industrial Informatics, 2020, 16, 532-543.	7.2	23
15	CDPM: Convolutional Deformable Part Models for Semantically Aligned Person Re-Identification. IEEE Transactions on Image Processing, 2020, 29, 3416-3428.	6.0	24
16	Tangent Fisher Vector on Matrix Manifolds for Action Recognition. IEEE Transactions on Image Processing, 2020, 29, 3052-3064.	6.0	9
17	Abnormal Driving Detection With Normalized Driving Behavior Data: A Deep Learning Approach. IEEE Transactions on Vehicular Technology, 2020, 69, 6943-6951.	3.9	46
18	STA-CNN: Convolutional Spatial-Temporal Attention Learning for Action Recognition. IEEE Transactions on Image Processing, 2020, 29, 5783-5793.	6.0	50

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19	Fisher-Rao Metric. , 2020, , 1-3.		0
20	Asymmetric 3D Convolutional Neural Networks for action recognition. Pattern Recognition, 2019, 85, 1-12.	5.1	150
21	World From Blur. , 2019, , .		13
22	Dual Sticky Hierarchical Dirichlet Process Hidden Markov Model and Its Application to Natural Language Description of Motions. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 2355-2373.	9.7	13
23	Learning Attentions: Residual Attentional Siamese Network for High Performance Online Visual Tracking. , 2018, , .		390
24	Do not Lose the Details: Reinforced Representation Learning for High Performance Visual Tracking. , 2018, , .		19
25	Semi-Supervised Tensor-Based Graph Embedding Learning and Its Application to Visual Discriminant Tracking. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2017, 39, 172-188.	9.7	35
26	D2C: Deep cumulatively and comparatively learning for human age estimation. Pattern Recognition, 2017, 66, 95-105.	5.1	43
27	Multi-View Multi-Instance Learning Based on Joint Sparse Representation and Multi-View Dictionary Learning. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2017, 39, 2554-2560.	9.7	24
28	Guest Editorial Introduction to the Special Issue on Large-Scale Video Analytics for Enhanced Security: Algorithms and Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 589-592.	5.9	5
29	GRMA: Generalized Range Move Algorithms for the Efficient Optimization of MRFs. International Journal of Computer Vision, 2017, 121, 365-390.	10.9	0
30	Iteration Functions re-visited. Journal of Computational and Applied Mathematics, 2017, 311, 484-496.	1.1	3
31	Multi-Modal Curriculum Learning for Semi-Supervised Image Classification. IEEE Transactions on Image Processing, 2016, 25, 3249-3260.	6.0	215
32	Activity recognition using a supervised non-parametric hierarchical HMM. Neurocomputing, 2016, 199, 163-177.	3.5	41
33	Hierarchical aesthetic quality assessment using deep convolutional neural networks. Signal Processing: Image Communication, 2016, 47, 500-510.	1.8	62
34	A Fisher–Rao Metric for Curves Using the Information in Edges. Journal of Mathematical Imaging and Vision, 2016, 54, 287-300.	0.8	1
35	Fusing $\mathcal{R}$ R Features and Local Features with Context-Aware Kernels for Action Recognition. International Journal of Computer Vision, 2016, 118, 151-171.	10.9	9
36	Stereo matching-based definition of saliency via sample-based Kullback–Leibler divergence estimation. Machine Vision and Applications, 2015, 26, 607-618.	1.7	2

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37	Action classification using a discriminative multilevel HDP-HMM. Neurocomputing, 2015, 154, 149-161.	3.5	17
38	A Robust Tracking System for Low Frame Rate Video. International Journal of Computer Vision, 2015, 115, 279-304.	10.9	76
39	Robust hand tracking via novel multi-cue integration. Neurocomputing, 2015, 157, 296-305.	3.5	27
40	Large-Scale Weakly Supervised Object Localization via Latent Category Learning. IEEE Transactions on Image Processing, 2015, 24, 1371-1385.	6.0	45
41	Graph-Embedding-Based Learning for Robust Object Tracking. IEEE Transactions on Industrial Electronics, 2014, 61, 1072-1084.	5.2	45
42	Image Classification Using Multiscale Information Fusion Based on Saliency Driven Nonlinear Diffusion Filtering. IEEE Transactions on Image Processing, 2014, 23, 1513-1526.	6.0	34
43	Bin Ratio-Based Histogram Distances and Their Application to Image Classification. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2014, 36, 2338-2352.	9.7	24
44	Fisher-Rao Metric. , 2014, , 298-300.		0
45	An IR and visible image sequence automatic registration method based on optical flow. Machine Vision and Applications, 2013, 24, 947-958.	1.7	9
46	An Improved Hierarchical Dirichlet Process-Hidden Markov Model and Its Application to Trajectory Modeling and Retrieval. International Journal of Computer Vision, 2013, 105, 246-268.	10.9	9
47	3D R Transform on Spatio-temporal Interest Points for Action Recognition. , 2013, , .		60
48	Robust Head Tracking Based on Multiple Cues Fusion in the Kernel-Bayesian Framework. IEEE Transactions on Circuits and Systems for Video Technology, 2013, 23, 1197-1208.	5.6	15
49	Block covariance based l1 tracker with a subtle template dictionary. Pattern Recognition, 2013, 46, 1750-1761.	5.1	28
50	Manifold Regularized Multitask Learning for Semi-Supervised Multilabel Image Classification. IEEE Transactions on Image Processing, 2013, 22, 523-536.	6.0	163
51	Discriminant Tracking Using Tensor Representation with Semi-supervised Improvement. , 2013, , .		11
52	An Incremental DPMM-Based Method for Trajectory Clustering, Modeling, and Retrieval. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 1051-1065.	9.7	92
53	Single and Multiple Object Tracking Using Log-Euclidean Riemannian Subspace and Block-Division Appearance Model. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2012, 34, 2420-2440.	9.7	172
54	A Fisher-Rao Metric for Paracatadioptric Images of Lines. International Journal of Computer Vision, 2012, 99, 147-165.	10.9	8

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55	A Survey on Visual Content-Based Video Indexing and Retrieval. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2011, 41, 797-819.	3.3	441
56	Visual tracking via dynamic tensor analysis with mean update. Neurocomputing, 2011, 74, 3277-3285.	3.5	14
57	Incremental Tensor Subspace Learning and Its Applications toÂForeground Segmentation and Tracking. International Journal of Computer Vision, 2011, 91, 303-327.	10.9	176
58	Multiple Object Tracking Via Species-Based Particle Swarm Optimization. IEEE Transactions on Circuits and Systems for Video Technology, 2010, 20, 1590-1602.	5.6	80
59	Domain Transfer SVM for video concept detection. , 2009, , .		60
60	Efficient human pose estimation via parsing a tree structure based human model. , 2009, , .		8
61	Multi-object tracking via species based particle swarm optimization. , 2009, , .		11
62	Human Behavior Analysis Based on a New Motion Descriptor. IEEE Transactions on Circuits and Systems for Video Technology, 2009, 19, 1830-1840.	5.6	16
63	Occlusion Reasoning for Tracking Multiple People. IEEE Transactions on Circuits and Systems for Video Technology, 2009, 19, 114-121.	5.6	38
64	Domain Transfer SVM for video concept detection. , 2009, , .		2
65	A real-time object detecting and tracking system for outdoor night surveillance. Pattern Recognition, 2008, 41, 432-444.	5.1	114
66	Tensor Rank One Discriminant Analysisâ€"A convergent method for discriminative multilinear subspace selection. Neurocomputing, 2008, 71, 1866-1882.	3.5	93
67	Visual music and musical vision. Neurocomputing, 2008, 71, 2023-2028.	3.5	13
68	Gait Components and Their Application to Gender Recognition. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2008, 38, 145-155.	3.3	227
69	Sequential particle swarm optimization for visual tracking. , 2008, , .		59
70	Bayesian tensor analysis. , 2008, , .		12
71	THE FISHERâ€"RAO METRIC FOR LINES IN A CONVEX IMAGE. International Journal of Pattern Recognition and Artificial Intelligence, 2007, 21, 977-994.	0.7	3
72	Gender recognition based on local body motions. , 2007, , .		9

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73	Recognition of Pornographic Web Pages by Classifying Texts and Images. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2007, 29, 1019-1034.	9.7	158
74	Negative Samples Analysis in Relevance Feedback. IEEE Transactions on Knowledge and Data Engineering, 2007, 19, 568-580.	4.0	99
75	Graph Based Discriminative Learning for Robust and Efficient Object Tracking. , 2007, , .		46
76	Semantic-Based Surveillance Video Retrieval. IEEE Transactions on Image Processing, 2007, 16, 1168-1181.	6.0	208
77	Application of the Fisher-Rao Metric to Ellipse Detection. International Journal of Computer Vision, 2007, 72, 287-307.	10.9	8
78	Supervised tensor learning. Knowledge and Information Systems, 2007, 13, 1-42.	2.1	281
79	A system for learning statistical motion patterns. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2006, 28, 1450-1464.	9.7	449
80	Principal axis-based correspondence between multiple cameras for people tracking. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2006, 28, 663-671.	9.7	206
81	Application of the Fisher-Rao Metric to Structure Detection. Journal of Mathematical Imaging and Vision, 2006, 25, 49-62.	0.8	4
82	The Fisher-Rao Metric for Projective Transformations of the Line. International Journal of Computer Vision, 2005, 63, 191-206.	10.9	15
83	Detection of image structures using the Fisher information and the Rao metric. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2004, 26, 1579-1589.	9.7	19
84	Fisher information and model selection for projective transformations of the line. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2003, 459, 1829-1849.	1.0	5
85	MINIMUM DESCRIPTION LENGTH METHOD FOR FACET MATCHING. Series in Machine Perception and Artificial Intelligence, 2001, , 61-69.	0.1	0
86	Visual Surveillance for Moving Vehicles. International Journal of Computer Vision, 2000, 37, 187-197.	10.9	77
87	MINIMUM DESCRIPTION LENGTH METHOD FOR FACET MATCHING. International Journal of Pattern Recognition and Artificial Intelligence, 2000, 14, 919-927.	0.7	4
88	Probabilistic analysis of the application of the cross ratio to model based vision: Misclassification. International Journal of Computer Vision, 1995, 14, 199-210.	10.9	28
89	A theory of self-calibration of a moving camera. International Journal of Computer Vision, 1992, 8, 123-151.	10.9	688
90	Motion from point matches: Multiplicity of solutions. International Journal of Computer Vision, 1990, 4, 225-246.	10.9	235