Kar-Ann Toh

List of Publications by Year
in descending order

135 papers	2,356 citations	279778 23 h-index	254170 43 g-index
135 all docs	135 docs citations	135 times ranked	1949 citing authors

#	Article	IF	Citations
1	Delayered IC image analysis with template‐based Tanimoto Convolution and Morphological Decision. IET Circuits, Devices and Systems, 2022, 16, 169-177.	1.4	3
2	Blockwise Recursive Moore–Penrose Inverse for Network Learning. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 3237-3250.	9.3	6
3	An analytic layer-wise deep learning framework with applications to robotics. Automatica, 2022, 135, 110007.	5.0	8
4	Wi-Fi Based User Identification Using In-Air Handwritten Signature. IEEE Access, 2021, 9, 53548-53565.	4.2	5
5	Training Multilayer Neural Networks Analytically Using Kernel Projection. , 2021, , .		2
6	Correlation Projection for Analytic Learning of a Classification Network. Neural Processing Letters, 2021, 53, 3893.	3.2	1
7	Machine learning-based leaky momentum prediction of plasmonic random nanosubstrate. Optics Express, 2021, 29, 30625.	3.4	4
8	Palm-Vein Verification Using Images From the Visible Spectrum. IEEE Access, 2021, 9, 86914-86927.	4.2	7
9	Super-resolved Raman microscopy using random structured light illumination: Concept and feasibility. Journal of Chemical Physics, 2021, 155, 144202.	3.0	15
10	Online Heterogeneous Face Recognition Based on Total-Error-Rate Minimization. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 1286-1299.	9.3	6
11	Pedestrian Detection Using Pixel Difference Matrix Projection. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 1441-1454.	8.0	8
12	Extraction and Cross-Matching of Palm-Vein and Palmprint From the RGB and the NIR Spectrums for Identity Verification. IEEE Access, 2020, 8, 4005-4021.	4.2	20
13	Training a multilayer network with low-memory kernel-and-range projection. Journal of the Franklin Institute, 2020, 357, 522-550.	3.4	4
14	Surface Plasmon Localization-Based Super-resolved Raman Microscopy. Nano Letters, 2020, 20, 8951-8958.	9.1	24
15	A Data-Driven Iterative Learning Algorithm for Robot Kinematics Approximation. , 2019, , .		3
16	Transfer Learning of Wi-Fi Handwritten Signature Signals for Identity Verification based on the Kernel and the Range Space Projection. , 2019, , .		3
17	Augmented EMD for complex‐valued univariate signals. IET Signal Processing, 2019, 13, 424-433.	1.5	2
18	Global Template Projection and Matching Method for Training-Free Analysis of Delayered IC Images. , 2019, , .		9

#	Article	IF	Citations
19	A Low-Memory Learning Formulation for a Kernel-and-Range Network. , 2019, , .		3
20	Nasal similarity measure of 3D faces based on curve shape space. Pattern Recognition, 2019, 88, 458-469.	8.1	14
21	A Line Feature Extraction Method for Finger-Knuckle-Print Verification. Cognitive Computation, 2019, 11, 50-70.	5.2	18
22	Wi-Fi Based Handwritten Signature Verification Using a Triplet Network. , 2019, , .		1
23	An Analytic Gabor Feedforward Network for Single-Sample and Pose-Invariant Face Recognition. IEEE Transactions on Image Processing, 2018, 27, 2791-2805.	9.8	23
24	Hybrid <inline-formula> <tex-math notation="LaTeX">${K}$ </tex-math> </inline-formula>-Means Clustering and Support Vector Machine Method for via and Metal Line Detections in Delayered IC Images. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 1849-1853.	3.0	18
25	Micro-Doppler Mini-UAV Classification Using Empirical-Mode Decomposition Features. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 227-231.	3.1	69
26	Exploiting the categorical reliability difference for binary classification. Journal of the Franklin Institute, 2018, 355, 2022-2040.	3.4	2
27	Biomedical image classification based on a cascade of an SVM with a reject option and subspace analysis. Computers in Biology and Medicine, 2018, 96, 128-140.	7.0	19
28	Optimizing between data transformation and parametric weighting for stable binary classification. Journal of the Franklin Institute, 2018, 355, 1614-1637.	3.4	1
29	Twin SVM with a reject option through ROC curve. Journal of the Franklin Institute, 2018, 355, 1710-1732.	3.4	8
30	Stretchy binary classification. Neural Networks, 2018, 97, 74-91.	5.9	5
31	EMD-Based Entropy Features for micro-Doppler Mini-UAV Classification. , 2018, , .		6
32	Learning from the kernel and the range space. , 2018, , .		9
33	Palm-Vein Recognition Using RGB Images. , 2018, , .		3
34	Orthogonal filter banks with region Log-TiedRank covariance matrices for face recognition. Journal of Visual Communication and Image Representation, 2018, 55, 548-560.	2.8	3
35	Kernel and Range Approach to Analytic Network Learning. International Journal of Networked and Distributed Computing, 2018, 7, 20.	1.9	11
36	Kernel and Range Approach to Analytic Network Learning. International Journal of Networked and Distributed Computing, 2018, 7, 20.	1.9	0

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37	Density-Dependent Quantized Least Squares Support Vector Machine for Large Data Sets. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 94-106.	11.3	45
38	A Gabor-based network for heterogeneous face recognition. Neurocomputing, 2017, 261, 253-265.	5.9	18
39	LLC encoded BoW features and softmax regression for microscopic image classification. , 2017, , .		11
40	Stacking PCANet +: An Overly Simplified ConvNets Baseline for Face Recognition. IEEE Signal Processing Letters, 2017, 24, 1581-1585.	3.6	33
41	Analytic radar micro-Doppler signatures classification. Proceedings of SPIE, 2017, , .	0.8	0
42	Eye detection in a facial image under pose variation based on multi-scale iris shape feature. Image and Vision Computing, 2017, 57, 147-164.	4.5	26
43	An adaptive local binary pattern for 3D hand tracking. Pattern Recognition, 2017, 61, 139-152.	8.1	25
44	An EMD-based micro-Doppler signature analysis for mini-UAV blade flash reconstruction. , 2017, , .		10
45	Optimizing Data Transformation for Binary Classification. International Journal of Computer Theory and Engineering, 2017, 9, 11-15.	3.4	2
46	An In-Air Signature Verification System Using Wi-Fi Signals. , 2017, , .		4
47	Recursive total error rate minimization. , 2016, , .		0
48	A folding sum transformation for binary classification. , 2016, , .		0
49	Finger-knuckle-print for identity verification based on difference images. , 2016, , .		6
50	Face recognition based on stretchy regression. , 2016, , .		1
51	A Randomly Weighted Gabor Network for Visual-Thermal Infrared Face Recognition. Proceedings in Adaptation, Learning and Optimization, 2016, , 335-344.	1.6	1
52	An empirical study on iris recognition in a mobile phone. Expert Systems With Applications, 2016, 54, 328-339.	7.6	39
53	A dictionary updating scheme incorporating words elimination into Quantized Kernel Least-Mean-Squares for changing environments. , 2015, , .		1
54	Stretchy multivariate polynomial classification. , 2015, , .		2

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55	New Trends of Learning in Computational Intelligence (Part II) [Guest Editorial]. IEEE Computational Intelligence Magazine, 2015, 10, 8-8.	3.2	4
56	New Trends of Learning in Computational Intelligence [Guest Editorial]. IEEE Computational Intelligence Magazine, 2015, 10, 16-17.	3.2	49
57	Sequential extreme learning machine incorporating survival error potential. Neurocomputing, 2015, 155, 194-204.	5.9	7
58	A center sliding Bayesian binary classifier adopting orthogonal polynomials. Pattern Recognition, 2015, 48, 2013-2028.	8.1	12
59	Object tracking based on an online learning network with total error rate minimization. Pattern Recognition, 2015, 48, 126-139.	8.1	20
60	Empirical survival error potential weighted least squares for binary pattern classification. , 2014, , .		1
61	A single layer feedforward fusion network for face verification. , 2014, , .		1
62	Twisting key absolute space for stretchy polynomial regression. , 2014, , .		2
63	Joint kernel collaborative representation on Tensor manifold for face recognition. , 2014, , .		3
64	Combining sclera and periocular features for multi-modal identity verification. Neurocomputing, 2014, 128, 185-198.	5.9	31
65	Face detection based on skin color likelihood. Pattern Recognition, 2014, 47, 1573-1585.	8.1	68
66	Pattern classification adopting multivariate polynomials. , 2014, , .		1
67	Exploiting the relationships among several binary classifiers via data transformation. Pattern Recognition, 2014, 47, 1509-1522.	8.1	11
68	Weighted Online Sequential Extreme Learning Machine for Class Imbalance Learning. Neural Processing Letters, 2013, 38, 465-486.	3.2	92
69	Dynamic Detection-Rate-Based Bit Allocation With Genuine Interval Concealment for Binary Biometric Representation. IEEE Transactions on Cybernetics, 2013, 43, 843-857.	9.5	10
70	An online learning network for biometric scores fusion. Neurocomputing, 2013, 102, 65-77.	5.9	19
71	Extreme Learning Machines [Trends & Controversies]. IEEE Intelligent Systems, 2013, 28, 30-59.	4.0	329
72	Object tracking based on kernel recursive least-squares with total error rate minimization. , 2013, , .		0

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73	Face identity verification based on sinusoidal projection. , 2013, , .		2
74	Service-oriented architecture based on biometric using random features and incremental neural networks. Soft Computing, 2012, 16, 1539-1553.	3.6	8
75	On projection-based methods for periocular identity verification. , 2012, , .		2
76	Extracting sclera features for cancelable identity verification. , 2012, , .		30
77	A system for hand gesture based signature recognition. , 2012, , .		17
78	An efficient dynamic reliability-dependent bit allocation for biometric discretization. Pattern Recognition, 2012, 45, 1960-1971.	8.1	82
79	An online AUC formulation for binary classification. Pattern Recognition, 2012, 45, 2266-2279.	8.1	13
80	Incremental face recognition for large-scale social network services. Pattern Recognition, 2012, 45, 2868-2883.	8.1	44
81	Extraction and fusion of partial face features for cancelable identity verification. Pattern Recognition, 2012, 45, 3288-3303.	8.1	21
82	Online AUC learning for biometric scores fusion. , 2011, , .		1
83	Visual tracking with online discriminative learning. , 2011, , .		1
84	Combining local face image features for identity verification. Neurocomputing, 2011, 74, 2452-2463.	5.9	8
85	An efficient incremental face annotation for large scale web services. Telecommunication Systems, 2011, 47, 197-214.	2.5	5
86	An analysis on equal width quantization and linearly separable subcode encoding-based discretization and its performance resemblances. Eurasip Journal on Advances in Signal Processing, 2011, 2011, .	1.7	6
87	Biometric security for mobile computing. Security and Communication Networks, 2011, 4, 483-486.	1.5	3
88	Fusion of visual and infrared face verification systems. Security and Communication Networks, 2011, 4, 500-514.	1.5	2
89	Realtime training on mobile devices for face recognition applications. Pattern Recognition, 2011, 44, 386-400.	8.1	54
90	Fusion of structured projections for cancelable face identity verification. , 2011, , .		1

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91	MULTIMODAL BIOMETRICS: AN OVERVIEW AND SOME RECENT DEVELOPMENTS. , 2011, , 381-400.		0
92	SVM-based feature extraction for face recognition. Pattern Recognition, 2010, 43, 2871-2881.	8.1	61
93	Cancellable biometrics and user-dependent multi-state discretization in BioHash. Pattern Analysis and Applications, 2010, 13, 301-307.	4.6	27
94	A performance driven methodology for cancelable face templates generation. Pattern Recognition, 2010, 43, 2544-2559.	8.1	19
95	An illumination invariant skin-color model for face detection. , 2010, , .		4
96	An online learning algorithm for biometric scores fusion. , 2010, , .		6
97	A projection framework for biometrie scores fusion. , 2010, , .		3
98	An image edge mask for face identity verification. , 2010, , .		3
99	Adaptive reduced multivariate polynomial equalizers for blu-ray disc channels. IEEE Transactions on Consumer Electronics, 2010, 56, 682-686.	3.6	1
100	Direct extraction and fusion of image pixel features for face identity verification. , 2010, , .		2
101	Fusion of visual and infrared face biometric scores by projection. , 2009, , .		0
102	Gait recognition using multi-bipolarized contour vector. International Journal of Control, Automation and Systems, 2009, 7, 799-808.	2.7	23
103	Fusing horizontal and vertical components of face images for identity verification. , 2009, , .		4
104	Two-fold regularization for kernel Fisher discriminant analysis in face recognition. IEICE Electronics Express, 2009, 6, 540-545.	0.8	1
105	Biometric scores fusion based on total error rate minimization. Pattern Recognition, 2008, 41, 1066-1082.	8.1	59
106	Maximizing area under ROC curve for biometric scores fusion. Pattern Recognition, 2008, 41, 3373-3392.	8.1	49
107	Fusion of visual and infra-red face scores by weighted power series. Pattern Recognition Letters, 2008, 29, 603-615.	4.2	6
108	An error-counting network for pattern classification. Neurocomputing, 2008, 71, 1680-1693.	5.9	4

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109	Between Classification-Error Approximation and Weighted Least-Squares Learning. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2008, 30, 658-669.	13.9	69
110	A collaborative face recognition framework on a social network platform. , 2008, , .		9
111	Surrounding adaptive color image enhancement based on CIECAM02. Conference Proceedings IEEE International Conference on Systems, Man, and Cybernetics, 2008, , .	0.0	3
112	DEWS: A Live Visual Surveillance System for Early Drowning Detection at Pool. IEEE Transactions on Circuits and Systems for Video Technology, 2008, 18, 196-210.	8.3	54
113	A method to combine visual and infrared face image verification systems. , 2008, , .		1
114	Between AUC based and error rate based learning. , 2008, , .		1
115	SVM-based Discriminant Analysis for face recognition. , 2008, , .		0
116	Secure biometric-key generation with biometric helper. , 2008, , .		30
117	Sparse random projection for efficient cancelable face feature extraction. , 2008, , .		4
118	Deterministic Neural Classification. Neural Computation, 2008, 20, 1565-1595.	2.2	89
119	Projection learning models. , 2008, , .		1
120	Robust Identity Verification Based on Infrared Face Images. , 2007, , .		4
121	Simple Power Series for Pattern Classification. , 2007, , .		0
122	An Encoding Scheme for Robust Face Recognition. , 2007, , .		0
123	Performance Based Revocable Biometrics. , 2007, , .		2
124	Robust Identity Verification Based on Infrared Face Images. , 2007, , .		0
125	A Method to Enhance Face Biometric Security. , 2007, , .		42
126	Error-Rate Based Biometrics Fusion. Lecture Notes in Computer Science, 2007, , 191-200.	1.3	3

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127	Changeable Biometrics for Appearance Based Face Recognition. , 2006, , .		41
128	Training a reciprocal-sigmoid classifier by feature scaling-space. Machine Learning, 2006, 65, 273-308.	5.4	13
129	Training a Â¿-Machine Classifier Using Feature Scaling-Space. , 2006, , .		1
130	Learning from Target Knowledge Approximation. , 2006, , .		15
131	A Framework for Empirical Classifiers Comparison. , 2006, , .		1
132	Model-guided deformable hand shape recognition without positioning aids. Pattern Recognition, 2005, 38, 1651-1664.	8.1	46
133	Benchmarking a reduced multivariate polynomial pattern classifier. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2004, 26, 740-755.	13.9	111
134	Global Optimization by Monotonic Transformation. Computational Optimization and Applications, 2002, 23, 77-99.	1.6	12
135	An expert autotuner for multiloop SISO controllers. Control Engineering Practice, 1993, 1, 999-1008.	5.5	5