Cheng-Lin Liu

List of Publications by Year
in descending order

143 papers	8,224 citations	100601 38 h-index	71088 80 g-index
147 all docs	147 docs citations	147 times ranked	5329 citing authors

#	Article	IF	Citations
1	Deep Neural Network Self-Distillation Exploiting Data Representation Invariance. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 257-269.	7.2	13
2	Instance GNN: A Learning Framework for Joint Symbol Segmentation and Recognition in Online Handwritten Diagrams. IEEE Transactions on Multimedia, 2022, 24, 2580-2594.	5.2	20
3	Meta-Prototypical Learning for Domain-Agnostic Few-Shot Recognition. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 6990-6996.	7.2	12
4	Query Pixel Guided Stroke Extraction with Model-Based Matching for Offline Handwritten Chinese Characters. Pattern Recognition, 2022, 123, 108416.	5.1	4
5	Decision-Based Adversarial Attack With Frequency Mixup. IEEE Transactions on Information Forensics and Security, 2022, 17, 1038-1052.	4.5	13
6	Unsupervised Structure-Texture Separation Network for Oracle Character Recognition. IEEE Transactions on Image Processing, 2022, 31, 3137-3150.	6.0	9
7	CASIA-onDo: A New Database for Online Handwritten Document Analysis. Lecture Notes in Computer Science, 2022, , 174-188.	1.0	1
8	Adaptable Global Network for Whole-Brain Segmentation with Symmetry Consistency Loss. Cognitive Computation, 2022, 14, 2246-2259.	3.6	1
9	Cross-Lingual Text Image Recognition via Multi-Hierarchy Cross-Modal Mimic. IEEE Transactions on Multimedia, 2022, , 1-13.	5.2	3
10	Cross-modal prototype learning for zero-shot handwritten character recognition. Pattern Recognition, 2022, 131, 108859.	5.1	9
11	Plane Geometry Diagram Parsing. , 2022, , .		4
12	Dynamical Channel Pruning by Conditional Accuracy Change for Deep Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 799-813.	7.2	32
13	BlockQNN: Efficient Block-Wise Neural Network Architecture Generation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021, 43, 2314-2328.	9.7	54
14	Editorial: Special Issue on Recent Advances in Cognitive Learning and Data Analysis. Cognitive Computation, 2021, 13, 785-786.	3.6	2
15	Residual Dual Scale Scene Text Spotting by Fusing Bottom-Up and Top-Down Processing. International Journal of Computer Vision, 2021, 129, 619-637.	10.9	15
16	F-mixup: Attack CNNs From Fourier Perspective. , 2021, , .		3
17	Joint stroke classification and text line grouping in online handwritten documents with edge pooling attention networks. Pattern Recognition, 2021, 114, 107859.	5.1	6
18	Deformable scene text detection using harmonic features and modified pixel aggregation network. Pattern Recognition Letters, 2021, 152, 135-142.	2.6	4

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19	Semantic-Aware Video Text Detection. , 2021, , .		11
20	Realtime multi-scale scene text detection with scale-based region proposal network. Pattern Recognition, 2020, 98, 107026.	5.1	36
21	Total-Text: toward orientation robustness in scene text detection. International Journal on Document Analysis and Recognition, 2020, 23, 31-52.	2.7	66
22	Discriminative structure learning of sum–product networks for data stream classification. Neural Networks, 2020, 123, 163-175.	3.3	1
23	MuLTReNets: Multilingual text recognition networks for simultaneous script identification and handwriting recognition. Pattern Recognition, 2020, 108, 107555.	5.1	19
24	A benchmark for unconstrained online handwritten Uyghur word recognition. International Journal on Document Analysis and Recognition, 2020, 23, 205-218.	2.7	2
25	Towards Robust Pattern Recognition: A Review. Proceedings of the IEEE, 2020, 108, 894-922.	16.4	76
26	Contextual Stroke Classification in Online Handwritten Documents with Edge Graph Attention Networks. SN Computer Science, 2020, 1, 1.	2.3	5
27	Teaching machines to write like humans using L-attributed grammar. Engineering Applications of Artificial Intelligence, 2020, 90, 103489.	4.3	0
28	Handwritten Mathematical Expression Recognition via Paired Adversarial Learning. International Journal of Computer Vision, 2020, 128, 2386-2401.	10.9	57
29	Online semi-supervised learning with learning vector quantization. Neurocomputing, 2020, 399, 467-478.	3.5	16
30	Weakly Supervised Learning for Over-Segmentation Based Handwritten Chinese Text Recognition. , 2020, , .		13
31	Convolutional Prototype Network for Open Set Recognition. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, PP, 1-1.	9.7	53
32	Discriminative Feature Selection via Employing Smooth and Robust Hinge Loss. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 788-802.	7.2	8
33	Editorial for special issue on "Advanced Topics in Document Analysis and Recognition". International Journal on Document Analysis and Recognition, 2019, 22, 189-191.	2.7	2
34	Image-to-Markup Generation via Paired Adversarial Learning. Lecture Notes in Computer Science, 2019, , 18-34.	1.0	24
35	Multisource Transfer Learning for Cross-Subject EEG Emotion Recognition. IEEE Transactions on Cybernetics, 2019, 50, 1-13.	6.2	171
36	Deep Learning Based Handwritten Chinese Character and Text Recognition. Cognitive Computation Trends, 2019, , 57-88.	1.7	2

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37	TextDragon: An End-to-End Framework for Arbitrary Shaped Text Spotting. , 2019, , .		128
38	Oracle Character Recognition by Nearest Neighbor Classification with Deep Metric Learning. , 2019, , .		19
39	Arbitrary Shape Scene Text Detection With Adaptive Text Region Representation. , 2019, , .		124
40	Contextual Stroke Classification in Online Handwritten Documents with Graph Attention Networks. , 2019, , .		11
41	CASIA-AHCDB: A Large-Scale Chinese Ancient Handwritten Characters Database. , 2019, , .		12
42	LightweightNet: Toward fast and lightweight convolutional neural networks via architecture distillation. Pattern Recognition, 2019, 88, 272-284.	5.1	39
43	Data-Distortion Guided Self-Distillation for Deep Neural Networks. Proceedings of the AAAI Conference on Artificial Intelligence, 2019, 33, 5565-5572.	3.6	82
44	Special Issue of BICS 2016. Cognitive Computation, 2018, 10, 282-283.	3.6	0
45	Drawing and Recognizing Chinese Characters with Recurrent Neural Network. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 849-862.	9.7	245
46	Incremental Adaptive Learning Vector Quantization for Character Recognition with Continuous Style Adaptation. Cognitive Computation, 2018, 10, 334-346.	3.6	5
47	Practical Block-Wise Neural Network Architecture Generation. , 2018, , .		296
48	Page Object Detection from PDF Document Images by Deep Structured Prediction and Supervised Clustering. , 2018, , .		28
49	Printed/Handwritten Texts and Graphics Separation in Complex Documents Using Conditional Random Fields. , 2018, , .		9
50	Multi-Oriented and Multi-Lingual Scene Text Detection With Direct Regression. IEEE Transactions on Image Processing, 2018, 27, 5406-5419.	6.0	84
51	Fast genre classification of web images using global and local features. CAAI Transactions on Intelligence Technology, 2018, 3, 161-168.	3.4	9
52	Special issue on deep learning for document analysis and recognition. International Journal on Document Analysis and Recognition, 2018, 21, 159-160.	2.7	9
53	Traffic Sign Detection Using a Cascade Method With Fast Feature Extraction and Saliency Test. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 3290-3302.	4.7	23
54	Keyword spotting in handwritten chinese documents using semi-markov conditional random fields. Engineering Applications of Artificial Intelligence, 2017, 58, 49-61.	4.3	5

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55	Chinese Handwriting Database Building and Benchmarking. , 2017, , 31-55.		1
56	LG-CNN: From local parts to global discrimination for fine-grained recognition. Pattern Recognition, 2017, 71, 118-131.	5.1	60
57	SDE: A Novel Selective, Discriminative and Equalizing Feature Representation for Visual Recognition. International Journal of Computer Vision, 2017, 124, 145-168.	10.9	23
58	Improving handwritten Chinese text recognition using neural network language models and convolutional neural network shape models. Pattern Recognition, 2017, 65, 251-264.	5.1	126
59	Online and offline handwritten Chinese character recognition: A comprehensive study and new benchmark. Pattern Recognition, 2017, 61, 348-360.	5.1	228
60	Deep Direct Regression for Multi-oriented Scene Text Detection. , 2017, , .		276
61	Joint training of conditional random fields and neural networks for stroke classification in online handwritten documents. , 2016, , .		4
62	Adaptive spatial pooling for image classification. Pattern Recognition, 2016, 55, 58-67.	5.1	33
63	Discriminative quadratic feature learning for handwritten Chinese character recognition. Pattern Recognition, 2016, 49, 7-18.	5.1	26
64	Incremental Learning Vector Quantization for Character Recognition with Local Style Consistency. Lecture Notes in Computer Science, 2016, , 228-239.	1.0	4
65	Neural network based over-segmentation for scene text recognition. , 2015, , .		1
66	Task-Driven Feature Pooling for Image Classification. , 2015, , .		27
67	A Sparse Projection and Low-Rank Recovery Framework for Handwriting Representation and Salient Stroke Feature Extraction. ACM Transactions on Intelligent Systems and Technology, 2015, 6, 1-26.	2.9	15
68	Evaluation of neural network language models in handwritten Chinese text recognition. , 2015, , .		2
69	Lexicon-driven recognition of one-stroke character strings in visual gesture. , 2015, , .		3
70	Improving Handwritten Chinese Character Recognition with Discriminative Quadratic Feature Extraction. , 2014, , .		1
71	Evaluation of Geometric Context Models for Handwritten Numeral String Recognition. , 2014, , .		5
72	An over-segmentation method for single-touching Chinese handwriting with learning-based filtering. International Journal on Document Analysis and Recognition, 2014, 17, 91-104.	2.7	17

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73	Contextual text/non-text stroke classification in online handwritten notes with conditional random fields. Pattern Recognition, 2014, 47, 959-968.	5.1	56
74	Unsupervised language model adaptation for handwritten Chinese text recognition. Pattern Recognition, 2014, 47, 1202-1216.	5.1	15
75	Learning confidence transformation for handwritten Chinese text recognition. International Journal on Document Analysis and Recognition, 2014, 17, 205-219.	2.7	4
76	Multi-class segmentation of free-form online documents with tree conditional random fields. International Journal on Document Analysis and Recognition, 2014, 17, 313-329.	2.7	15
77	Minimum-risk training for semi-Markov conditional random fields with application to handwritten Chinese/Japanese text recognition. Pattern Recognition, 2014, 47, 1904-1916.	5.1	24
78	Character confidence based on N-best list for keyword spotting in online Chinese handwritten documents. Pattern Recognition, 2014, 47, 1880-1890.	5.1	10
79	Geometry preserving multi-task metric learning. Machine Learning, 2013, 92, 133-175.	3.4	33
80	Evaluation of weighted Fisher criteria for large category dimensionality reduction in application to Chinese handwriting recognition. Pattern Recognition, 2013, 46, 2599-2611.	5.1	19
81	Common Sense Knowledge for Handwritten Chinese Text Recognition. Cognitive Computation, 2013, 5, 234-242.	3.6	73
82	Handwritten Chinese/Japanese Text Recognition Using Semi-Markov Conditional Random Fields. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 2413-2426.	9.7	67
83	A multi-task framework for metric learning with common subspace. Neural Computing and Applications, 2013, 22, 1337-1347.	3.2	13
84	Transcript mapping for handwritten Chinese documents by integrating character recognition model and geometric context. Pattern Recognition, 2013, 46, 2807-2818.	5.1	21
85	An evaluation of statistical methods in handwritten hangul recognition. International Journal on Document Analysis and Recognition, 2013, 16, 273-283.	2.7	4
86	Keyword Spotting in Online Chinese Handwritten Documents with Candidate Scoring Based on Semi-CRF Model. , 2013, , .		4
87	Learning-Based Candidate Segmentation Scoring for Real-Time Recognition of Online Overlaid Chinese Handwriting. , 2013, , .		10
88	GPU-Based Fast Training of Discriminative Learning Quadratic Discriminant Function for Handwritten Chinese Character Recognition. , 2013, , .		3
89	Visual Gesture Character String Recognition by Classification-Based Segmentation with Stroke Deletion. , 2013, , .		16
90	Style Consistent Perturbation for Handwritten Chinese Character Recognition. , 2013, , .		4

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91	Minimum Risk Training for Handwritten Chinese/Japanese Text Recognition Using Semi-Markov Conditional Random Fields. , 2013, , .		6
92	Writer Adaptation with Style Transfer Mapping. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 1773-1787.	9.7	66
93	Keyword spotting in unconstrained handwritten Chinese documents using contextual word model. Image and Vision Computing, 2013, 31, 958-968.	2.7	13
94	Dense Trajectories and Motion Boundary Descriptors for Action Recognition. International Journal of Computer Vision, 2013, 103, 60-79.	10.9	1,329
95	Online and offline handwritten Chinese character recognition: Benchmarking on new databases. Pattern Recognition, 2013, 46, 155-162.	5.1	248
96	Error-correcting output codes based ensemble feature extraction. Pattern Recognition, 2013, 46, 1091-1100.	5.1	35
97	Handwriting representation and recognition through a sparse projection and low-rank recovery framework. , 2013, , .		8
98	Feature Transformation with Class Conditional Decorrelation. , 2013, , .		0
99	KEYWORD SPOTTING FROM ONLINE CHINESE HANDWRITTEN DOCUMENTS USING ONE-VERSUS-ALL CHARACTER CLASSIFICATION MODEL. International Journal of Pattern Recognition and Artificial Intelligence, 2013, 27, 1353001.	0.7	3
100	Confused Distance Maximization for Large Category Dimensionality Reduction. , 2012, , .		5
101	Handwritten Chinese Text Recognition by Integrating Multiple Contexts. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2012, 34, 1469-1481.	9.7	143
102	Maxi-Min discriminant analysis via online learning. Neural Networks, 2012, 34, 56-64.	3.3	16
103	Improving Handwritten Chinese Text Recognition by Unsupervised Language Model Adaptation. , 2012, , .		6
104	Joint learning of error-correcting output codes and dichotomizers from data. Neural Computing and Applications, 2012, 21, 715-724.	3.2	10
105	An approach for real-time recognition of online Chinese handwritten sentences. Pattern Recognition, 2012, 45, 3661-3675.	5.1	51
106	Perceptron Learning of Modified Quadratic Discriminant Function. , 2011, , .		12
107	Improving Handwritten Chinese Text Recognition by Confidence Transformation. , 2011, , .		13
108	ICDAR 2011 Chinese Handwriting Recognition Competition. , 2011, , .		48

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109	Dynamic Text Line Segmentation for Real-Time Recognition of Chinese Handwritten Sentences. , 2011, , .		4
110	CASIA Online and Offline Chinese Handwriting Databases. , 2011, , .		307
111	Keyword Spotting in Offline Chinese Handwritten Documents Using a Statistical Model. , 2011, , .		8
112	A Hybrid Approach to Detect and Localize Texts in Natural Scene Images. IEEE Transactions on Image Processing, 2011, 20, 800-813.	6.0	315
113	Multi-Task Low-Rank Metric Learning Based on Common Subspace. Lecture Notes in Computer Science, 2011, , 151-159.	1.0	10
114	A robust model for on-line handwritten japanese text recognition. International Journal on Document Analysis and Recognition, 2010, 13, 121-131.	2.7	57
115	Regularized margin-based conditional log-likelihood loss for prototype learning. Pattern Recognition, 2010, 43, 2428-2438.	5.1	59
116	Integrating Geometric Context for Text Alignment of Handwritten Chinese Documents. , 2010, , .		16
117	Keyword Spotting from Online Chinese Handwritten Documents Using One-vs-All Trained Character Classifier. , 2010, , .		12
118	One-Vs-All Training of Prototype Classifier for Pattern Classification and Retrieval. , 2010, , .		14
119	Dimensionality Reduction by Minimal Distance Maximization. , 2010, , .		12
120	A Tool for Ground-Truthing Text Lines and Characters in Off-Line Handwritten Chinese Documents. , 2009, , .		16
121	Integrating Language Model in Handwritten Chinese Text Recognition. , 2009, , .		33
122	Online Handwritten Japanese Character String Recognition Using Conditional Random Fields. , 2009, , .		18
123	A new benchmark on the recognition of handwritten Bangla and Farsi numeral characters. Pattern Recognition, 2009, 42, 3287-3295.	5.1	94
124	A robust approach to text line grouping in online handwritten Japanese documents. Pattern Recognition, 2009, 42, 2077-2088.	5.1	28
125	Handwritten Chinese text line segmentation by clustering with distance metric learning. Pattern Recognition, 2009, 42, 3146-3157.	5.1	123
126	Partial discriminative training for classification of overlapping classes in document analysis. International Journal on Document Analysis and Recognition, 2008, 11, 53-65.	2.7	16

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127	High accuracy handwritten Chinese character recognition using LDA-based compound distances. Pattern Recognition, 2008, 41, 3442-3451.	5.1	52
128	Segmentation-free recognizer based on enhanced four plane feature for realistic Chinese handwriting. , 2008, , .		3
129	Partial Discriminative Training of Neural Networks for Classification of Overlapping Classes. Lecture Notes in Computer Science, 2008, , 137-146.	1.0	2
130	Handwritten text line extraction based on minimum spanning tree clustering. , 2007, , .		8
131	Normalization-Cooperated Gradient Feature Extraction for Handwritten Character Recognition. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2007, 29, 1465-1469.	9.7	116
132	Class-specific feature polynomial classifier for pattern classification and its application to handwritten numeral recognition. Pattern Recognition, 2006, 39, 669-681.	5.1	43
133	Classifier combination based on confidence transformation. Pattern Recognition, 2005, 38, 11-28.	5.1	105
134	Pseudo two-dimensional shape normalization methods for handwritten Chinese character recognition. Pattern Recognition, 2005, 38, 2242-2255.	5.1	77
135	Discriminative Learning Quadratic Discriminant Function for Handwriting Recognition. IEEE Transactions on Neural Networks, 2004, 15, 430-444.	4.8	104
136	Handwritten digit recognition: investigation of normalization and feature extraction techniques. Pattern Recognition, 2004, 37, 265-279.	5.1	251
137	Effects of classifier structures and training regimes on integrated segmentation and recognition of handwritten numeral strings. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2004, 26, 1395-1407.	9.7	86
138	Online recognition of chinese characters: the state-of-the-art. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2004, 26, 198-213.	9.7	270
139	Handwritten digit recognition: benchmarking of state-of-the-art techniques. Pattern Recognition, 2003, 36, 2271-2285.	5.1	449
140	Lexicon-driven segmentation and recognition of handwritten character strings for Japanese address reading. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2002, 24, 1425-1437.	9.7	141
141	Performance evaluation of pattern classifiers for handwritten character recognition. International Journal on Document Analysis and Recognition, 2002, 4, 191-204.	2.7	78
142	Evaluation of prototype learning algorithms for nearest-neighbor classifier in application to handwritten character recognition. Pattern Recognition, 2001, 34, 601-615.	5.1	141
143	Editorial: Special Issue on Recent Advances in Cognitive Learning and Data Analysis. Cognitive Computation, 0, , 1.	3.6	0