

# Jacob Goldberger

## List of Publications by Year in descending order

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Version: 2024-02-01

80  
papers

3,192  
citations

430754

18  
h-index

345118

36  
g-index

80  
all docs

80  
docs citations

80  
times ranked

3664  
citing authors

#	ARTICLE	IF	CITATIONS
1	GAN-based synthetic medical image augmentation for increased CNN performance in liver lesion classification. <i>Neurocomputing</i> , 2018, 321, 321-331.	3.5	1,083
2	Synthetic data augmentation using GAN for improved liver lesion classification. , 2018, , .		393
3	Constrained Gaussian mixture model framework for automatic segmentation of MR brain images. <i>IEEE Transactions on Medical Imaging</i> , 2006, 25, 1233-1245.	5.4	216
4	X-ray Categorization and Retrieval on the Organ and Pathology Level, Using Patch-Based Visual Words. <i>IEEE Transactions on Medical Imaging</i> , 2011, 30, 733-746.	5.4	158
5	Efficient Serial Message-Passing Schedules for LDPC Decoding. <i>IEEE Transactions on Information Theory</i> , 2007, 53, 4076-4091.	1.5	122
6	Probabilistic space-time video modeling via piecewise gmm. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2004, 26, 384-396.	9.7	113
7	Unsupervised image-set clustering using an information theoretic framework. <i>IEEE Transactions on Image Processing</i> , 2006, 15, 449-458.	6.0	99
8	Precise Detection in Densely Packed Scenes. , 2019, , .		99
9	A Continuous Probabilistic Framework for Image Matching. <i>Computer Vision and Image Understanding</i> , 2001, 84, 384-406.	3.0	73
10	MIMO Detection for High-Order QAM Based on a Gaussian Tree Approximation. <i>IEEE Transactions on Information Theory</i> , 2011, 57, 4973-4982.	1.5	72
11	Urban-Area Segmentation Using Visual Words. <i>IEEE Geoscience and Remote Sensing Letters</i> , 2009, 6, 388-392.	1.4	41
12	Speech Dereverberation Using Fully Convolutional Networks. , 2018, , .		40
13	Multi-View Probabilistic Classification of Breast Microcalcifications. <i>IEEE Transactions on Medical Imaging</i> , 2016, 35, 645-653.	5.4	37
14	Training a neural network based on unreliable human annotation of medical images. , 2018, , .		37
15	Multiple Sclerosis Lesion Detection Using Constrained GMM and Curve Evolution. <i>International Journal of Biomedical Imaging</i> , 2009, 2009, 1-13.	3.0	36
16	Patch-Based Segmentation with Spatial Consistency: Application to MS Lesions in Brain MRI. <i>International Journal of Biomedical Imaging</i> , 2016, 2016, 1-13.	3.0	34
17	Context-based segmentation of image sequences. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2006, 28, 463-468.	9.7	32
18	Task-Driven Dictionary Learning Based on Mutual Information for Medical Image Classification. <i>IEEE Transactions on Biomedical Engineering</i> , 2017, 64, 1380-1392.	2.5	31

#	ARTICLE	IF	CITATIONS
19	Simplifying Mixture Models Using the Unscented Transform. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2008, 30, 1496-1502.	9.7	28
20	Learning Entailment Relations by Global Graph Structure Optimization. Computational Linguistics, 2012, 38, 73-111.	2.5	28
21	Formant estimation and tracking: A deep learning approach. Journal of the Acoustical Society of America, 2019, 145, 642-653.	0.5	23
22	X-ray image categorization and retrieval using patch-based visualwords representation. , 2009, , .		21
23	A multi-view deep learning architecture for classification of breast microcalcifications. , 2016, , .		21
24	A Hybrid Approach for Speech Enhancement Using MoG Model and Neural Network Phoneme Classifier. IEEE/ACM Transactions on Audio Speech and Language Processing, 2016, 24, 2516-2530.	4.0	20
25	Combining Region and Edge Cues for Image Segmentation in a Probabilistic Gaussian Mixture Framework. , 2007, , .		18
26	Soft Labeling by Distilling Anatomical Knowledge for Improved MS Lesion Segmentation. , 2019, , .		18
27	Identification of introns harboring functional sequence elements through positional conservation. Scientific Reports, 2017, 7, 4201.	1.6	17
28	A phoneme-based pre-training approach for deep neural network with application to speech enhancement. , 2016, , .		16
29	Multi-phase liver lesions classification using relevant visual words based on mutual information. , 2015, , .		15
30	LESION DETECTION IN NOISY MR BRAIN IMAGES USING CONSTRAINED GMM AND ACTIVE CONTOURS. , 2007, , .		14
31	Distilling the wisdom of crowds: weighted aggregation of decisions on multiple issues. Autonomous Agents and Multi-Agent Systems, 2011, 22, 31-42.	1.3	14
32	Dimensionality reduction based on non-parametric mutual information. Neurocomputing, 2012, 80, 31-37.	3.5	13
33	A mixture of views network with applications to multi-view medical imaging. Neurocomputing, 2020, 374, 1-9.	3.5	12
34	Improved MIMO detection based on successive tree approximations. , 2013, , .		11
35	Efficient Global Learning of Entailment Graphs. Computational Linguistics, 2015, 41, 249-291.	2.5	11
36	Weakly and semi supervised detection in medical imaging via deep dual branch net. Neurocomputing, 2021, 421, 15-25.	3.5	11

#	ARTICLE	IF	CITATIONS
37	Fast Semi-Supervised Discriminative Component Analysis. IEEE International Workshop on Machine Learning for Signal Processing, 2007, , .	0.0	10
38	Intra-cluster training strategy for deep learning with applications to language identification. , 2016, , .		10
39	K-Autoencoders Deep Clustering. , 2020, , .		10
40	Classification of hyperspectral remote-sensing images using discriminative linear projections. International Journal of Remote Sensing, 2009, 30, 5605-5617.	1.3	9
41	Pseudo Prior Belief Propagation for densely connected discrete graphs. , 2010, , .		9
42	Beyond Condorcet: optimal aggregation rules using voting records. Theory and Decision, 2012, 72, 113-130.	0.5	9
43	Pairwise clustering based on the mutual-information criterion. Neurocomputing, 2016, 182, 284-293.	3.5	9
44	Iterative Tomographic Solution of Integer Least Squares Problems With Applications to MIMO Detection. IEEE Journal on Selected Topics in Signal Processing, 2011, 5, 1486-1496.	7.3	8
45	Deep recurrent mixture of experts for speech enhancement. , 2017, , .		7
46	Classification and Detection in Mammograms With Weak Supervision Via Dual Branch Deep Neural Net. , 2019, , .		7
47	MIMO decoding based on stochastic reconstruction from multiple projections. , 2009, , .		6
48	Lesion detection and segmentation in uterine cervix images using an ARC-LEVEL MRF. , 2009, , .		6
49	Efficient Anonymizations with Enhanced Utility. , 2009, , .		6
50	Tissue Classification of Noisy MR Brain Images Using Constrained GMM. Lecture Notes in Computer Science, 2005, 8, 790-797.	1.0	6
51	CRF with deep class embedding for large scale classification. Computer Vision and Image Understanding, 2020, 191, 102865.	3.0	5
52	Detection of Urban Zones in Satellite Images using Visual Words. , 2008, , .		4
53	An unsupervised data projection that preserves the cluster structure. Pattern Recognition Letters, 2012, 33, 256-262.	2.6	4
54	Combining soft decisions of several unreliable experts. , 2016, , .		4

#	ARTICLE	IF	CITATIONS
55	A Markov Clustering Method for Analyzing Movement Trajectories. IEEE International Workshop on Machine Learning for Signal Processing, 2007, , .	0.0	3
56	Unifying Unknown Nodes in the Internet Graph Using Semisupervised Spectral Clustering. , 2008, , .		3
57	A Mixture of Views Network With Applications to the Classification of Breast Microcalcifications. , 2019, , .		3
58	Speech Enhancement with Mixture of Deep Experts with Clean Clustering Pre-Training. , 2021, , .		3
59	Network Calibration by Class-based Temperature Scaling. , 2021, , .		3
60	Adaptation of a Multi-Site Network to a New Clinical Site Via Batch-Normalization Similarity. , 2022, , .		3
61	A classification-based linear projection of labeled hyperspectral data. , 2007, , .		2
62	Beyond Condorcet: Optimal Aggregation Rules Using Voting Records. SSRN Electronic Journal, 2010, , .	0.4	2
63	Mutual information based dimensionality reduction with application to non-linear regression. , 2010, , .		2
64	Breast tissue classification in mammograms using visual words. , 2012, , .		2
65	Atlas of Classifiers for Brain MRI Segmentation. Lecture Notes in Computer Science, 2017, , 36-44.	1.0	2
66	An Optimal Reduced Representation of a MoG with Applicatio to Medical Image Database Classification. , 2007, , .		1
67	MIMO detection based on averaging Gaussian projections. , 2014, , .		1
68	Mutual information criterion for feature selection with application to classification of breast microcalcifications. , 2016, , .		1
69	Successive relative transfer function identification using single microphone speech enhancement. , 2017, , .		1
70	Learning Probabilistic Fusion of Multilabel Lesion Contours. , 2020, , .		1
71	An atlas of classifiersâ€”a machine learning paradigm for brain MRI segmentation. Medical and Biological Engineering and Computing, 2021, 59, 1833-1849.	1.6	1
72	A Composite DNN Architecture for Speech Enhancement. , 2020, , .		1

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73	Class-Based Attention Mechanism for Chest Radiograph Multi-Label Categorization. , 2022, , .		1
74	System for pathology categorization and retrieval in chest radiographs. Proceedings of SPIE, 2011, , .	0.8	0
75	Combining clusterings with different detail levels. , 2016, , .		0
76	A deep neural network with a restricted noisy channel for identification of functional introns. , 2017, , .		0
77	Speech Enhancement With Deep Neural Networks Using MoG Based Labels. , 2018, , .		0
78	Information-bottleneck Based on the Jensen-shannon Divergence with Applications to Pairwise Clustering. , 2019, , .		0
79	Network Adaptation Strategies for Learning New Classes without Forgetting the Original Ones. , 2019, , .		0
80	Factorized CRF with Batch Normalization Based on the Entire Training Data. , 2021, , .		0