Nikhil R Pal

List of Publications by Citations

88 papers	**5,849** citations	**33** h-index	**76** g-index
90 ext. papers	**6,984** ext. citations	**5.1** avg, IF	**5.88** L-index

#	Paper	IF	Citations
88	A review on image segmentation techniques. *Pattern Recognition*, **1993**, 26, 1277-1294	7.7	2254
87	Fuzzy Models and Algorithms for Pattern Recognition and Image Processing. *The Handbooks of Fuzzy Sets Series*, **1999**,		562
86	Entropic thresholding. *Signal Processing*, **1989**, 16, 97-108	4.4	237
85	Genetic programming for simultaneous feature selection and classifier design. *IEEE Transactions on Systems, Man, and Cybernetics*, **2006**, 36, 106-17		216
84	Fuzzy Kohonen clustering networks. *Pattern Recognition*, **1994**, 27, 757-764	7.7	211
83	Some new information measures for fuzzy sets. *Information Sciences*, **1993**, 67, 209-228	7.7	204
82	A self-tuning fuzzy PI controller. *Fuzzy Sets and Systems*, **2000**, 115, 327-338	3.7	118
81	A neuro-fuzzy scheme for simultaneous feature selection and fuzzy rule-based classification. *IEEE Transactions on Neural Networks*, **2004**, 15, 110-23		108
80	On minimum cross-entropy thresholding. *Pattern Recognition*, **1996**, 29, 575-580	7.7	106
79	A Multiobjective Genetic Programming-Based Ensemble for Simultaneous Feature Selection and Classification. *IEEE Transactions on Cybernetics*, **2016**, 46, 499-510	10.2	95
78	QUANTIFICATION OF CONFLICT IN DEMPSTER-SHAFER FRAMEWORK: A NEW APPROACH. *International Journal of General Systems*, **1996**, 24, 407-423	2.1	81
77	. *IEEE Transactions on Fuzzy Systems*, **2015**, 23, 444-456	8.3	80
76	. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2013**, 43, 587-605	7.3	68
75	Feature analysis: Neural network and fuzzy set theoretic approaches. *Pattern Recognition*, **1997**, 30, 1579-1590	7.7	66
74	Uncertainty measures for evidential reasoning I: A review. *International Journal of Approximate Reasoning*, **1992**, 7, 165-183	3.6	66
73	ASMiGA: an archive-based steady-state micro genetic algorithm. *IEEE Transactions on Cybernetics*, **2015**, 45, 40-52	10.2	65
72	Uncertainty measures for evidential reasoning II: A new measure of total uncertainty. *International Journal of Approximate Reasoning*, **1993**, 8, 1-16	3.6	64

71	A Mutually Recurrent Interval Type-2 Neural Fuzzy System (MRIT2NFS) With Self-Evolving Structure and Parameters. *IEEE Transactions on Fuzzy Systems*, **2013**, 21, 492-509	8.3	62
70	An Integrated Mechanism for Feature Selection and Fuzzy Rule Extraction for Classification. *IEEE Transactions on Fuzzy Systems*, **2012**, 20, 683-698	8.3	53
69	Feature selection with SVD entropy: Some modification and extension. *Information Sciences*, **2014**, 264, 118-134	7.7	50
68	Breast cancer detection using rank nearest neighbor classification rules. *Pattern Recognition*, **2003**, 36, 25-34	7.7	50
67	Mountain and subtractive clustering method: Improvements and generalizations. *International Journal of Intelligent Systems*, **2000**, 15, 329-341	8.4	50
66	Image thresholding: Some new techniques. *Signal Processing*, **1993**, 33, 139-158	4.4	49
65	An Interval Type-2 Neural Fuzzy System for Online System Identification and Feature Elimination. *IEEE Transactions on Neural Networks and Learning Systems*, **2015**, 26, 1442-55	10.3	44
64	Discovering biomarkers from gene expression data for predicting cancer subgroups using neural networks and relational fuzzy clustering. *BMC Bioinformatics*, **2007**, 8, 5	3.6	42
63	Imputation of missing data with neural networks for classification. *Knowledge-Based Systems*, **2019**, 182, 104838	7.3	40
62	Selecting useful groups of features in a connectionist framework. *IEEE Transactions on Neural Networks*, **2008**, 19, 381-96		40
61	Fuzzy divergence, probability measure of fuzzy events and image thresholding. *Pattern Recognition Letters*, **1992**, 13, 857-867	4.7	40
60	Feature selection using a neural framework with controlled redundancy. *IEEE Transactions on Neural Networks and Learning Systems*, **2015**, 26, 35-50	10.3	39
59	A multi-stage neural network aided system for detection of microcalcifications in digitized mammograms. *Neurocomputing*, **2008**, 71, 2625-2634	5.4	39
58	Fuzzy Rule-Based Approach for Software Fault Prediction. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2017**, 47, 826-837	7.3	36
57	Some properties of the exponential entropy. *Information Sciences*, **1992**, 66, 119-137	7.7	36
56	Simultaneous structure identification and fuzzy rule generation for Takagi-Sugeno models. *IEEE Transactions on Systems, Man, and Cybernetics*, **2008**, 38, 1626-38		33
55	IMAGE MODEL, POISSON DISTRIBUTION AND OBJECT EXTRACTION. *International Journal of Pattern Recognition and Artificial Intelligence*, **1991**, 05, 459-483	1.1	29
54	On quantification of different facets of uncertainty. *Fuzzy Sets and Systems*, **1999**, 107, 81-91	3.7	25

53	Directed mutation in genetic algorithms. *Information Sciences*, **1994**, 79, 251-270	7.7	24
52	Self-crossover-a new genetic operator and its application to feature selection. *International Journal of Systems Science*, **1998**, 29, 207-212	2.3	23
51	A fast algorithm to compute precise type-2 centroids for real-time control applications. *IEEE Transactions on Cybernetics*, **2015**, 45, 340-53	10.2	22
50	Design of vector quantizer for image compression using self-organizing feature map and surface fitting. *IEEE Transactions on Image Processing*, **2004**, 13, 1291-303	8.7	22
49	OBJECT BACKGROUND CLASSIFICATION USING HOPFIELD TYPE NEURAL NETWORK. *International Journal of Pattern Recognition and Artificial Intelligence*, **1992**, 06, 989-1008	1.1	21
48	Unsupervised Feature Selection with Controlled Redundancy (UFeSCoR). *IEEE Transactions on Knowledge and Data Engineering*, **2015**, 27, 3390-3403	4.2	19
47	On rule pruning using fuzzy neural networks. *Fuzzy Sets and Systems*, **1999**, 106, 335-347	3.7	18
46	Discovery of protein phosphorylation motifs through exploratory data analysis. *PLoS ONE*, **2011**, 6, e20025	3.7	18
45	Identification of a small set of plasma signalling proteins using neural network for prediction of Alzheimer's disease. *Bioinformatics*, **2015**, 31, 2505-13	7.2	17
44	A note on fuzzy PI-type controllers with resetting action. *Fuzzy Sets and Systems*, **2001**, 121, 149-159	3.7	16
43	On object background classification. *International Journal of Systems Science*, **1992**, 23, 1903-1920	2.3	16
42	Segmentation based on measures of contrast, homogeneity, and region size. *IEEE Transactions on Systems, Man, and Cybernetics*, **1987**, 17, 857-868		16
41	Clustering of Mixed Data by Integrating Fuzzy, Probabilistic, and Collaborative Clustering Framework. *International Journal of Fuzzy Systems*, **2016**, 18, 339-348	3.6	16
40	Identification of amino acid propensities that are strong determinants of linear B-cell epitope using neural networks. *PLoS ONE*, **2012**, 7, e30617	3.7	15
39	A Self-Tuning Fuzzy PD Controller. *IETE Journal of Research*, **1998**, 44, 177-189	0.9	15
38	Evolutionary Methods for Unsupervised Feature Selection Using Sammon's Stress Function. *Fuzzy Information and Engineering*, **2010**, 2, 229-247	0.5	14
37	Local Divergences for Atanassov Intuitionistic Fuzzy Sets. *IEEE Transactions on Fuzzy Systems*, **2016**, 24, 360-373	8.3	12
36	Entropy measures for Atanassov intuitionistic fuzzy sets based on divergence. *Soft Computing*, **2018**, 22, 5051-5071	3.5	12

35	A neuro-fuzzy framework for inferencing. *Neural Networks*, **2002**, 15, 247-61	9.1	11
34	Quantifying Different Facets of Fuzzy Uncertainty. *The Handbooks of Fuzzy Sets Series*, **2000**, 459-480		11
33	A multistage generalization of the rank nearest neighbor classification rule. *Pattern Recognition Letters*, **1995**, 16, 601-614	4.7	11
32	Sensor (group feature) selection with controlled redundancy in a connectionist framework. *International Journal of Neural Systems*, **2014**, 24, 1450021	6.2	10
31	On hierarchical segmentation for image compression. *Pattern Recognition Letters*, **2000**, 21, 131-144	4.7	10
30	A Polak-Ribière-Polyak Conjugate Gradient-Based Neuro-Fuzzy Network and its Convergence. *IEEE Access*, **2018**, 6, 41551-41565	3.5	9
29	Identification of single- and multiple-class specific signature genes from gene expression profiles by group marker index. *PLoS ONE*, **2011**, 6, e24259	3.7	9
28	A fuzzy rule based approach to identify biomarkers for diagnostic classification of cancers. *IEEE International Conference on Fuzzy Systems*, **2007**,		9
27	Feature Selection Using a Neural Network With Group Lasso Regularization and Controlled Redundancy. *IEEE Transactions on Neural Networks and Learning Systems*, **2021**, 32, 1110-1123	10.3	9
26	Structural building blocks: construction of protein 3-D structures using a structural variant of mountain clustering method. *IEEE Engineering in Medicine and Biology Magazine*, **2009**, 28, 38-44		8
25	How to make a neural network say Don□know□*Information Sciences*, **2018**, 430-431, 444-466	7.7	8
24	Robust Multiobjective Optimization With Robust Consensus. *IEEE Transactions on Fuzzy Systems*, **2018**, 26, 3743-3754	8.3	8
23	Genetic Programming for Classification and Feature Selection. *Studies in Computational Intelligence*, **2019**, 119-141	0.8	6
22	Relational mountain (density) clustering method and web log analysis. *International Journal of Intelligent Systems*, **2005**, 20, 375-392	8.4	6
21	Soft Computing: Goal, Tools and Feasibility. *IETE Journal of Research*, **1996**, 42, 195-204	0.9	6
20	Redundancy-Constrained feature selection with radial basis function networks **2012**,		5
19	Evolution of Fuzzy Classifiers Using Genetic Programming. *Fuzzy Information and Engineering*, **2012**, 4, 29-49	0.5	4
18	A neuro-fuzzy system for inferencing. *International Journal of Intelligent Systems*, **1999**, 14, 1155-1182	8.4	4

#	Title	IF	Cites
17	Can edges help convolution neural networks in emotion recognition?. *Neurocomputing*, **2021**, 433, 162-168	5.4	4
16	Fast codebook searching in a SOM-based vector quantizer for image compression. *Signal, Image and Video Processing*, **2008**, 2, 39-49	1.6	3
15	Finding Synergy Networks From Gene Expression Data: A Fuzzy-Rule-Based Approach. *IEEE Transactions on Fuzzy Systems*, **2016**, 24, 1488-1499	8.3	3
14	Feature Extraction and Selection for Parsimonious Classifiers With Multiobjective Genetic Programming. *IEEE Transactions on Evolutionary Computation*, **2019**, 1-1	15.6	2
13	Prediction of Mammalian microRNA binding sites using Random Forests **2012**,		2
12	Incremental Mountain Clustering Method to find building blocks for constructing structures of proteins. *IEEE Transactions on Nanobioscience*, **2010**, 9, 278-88	3.4	2
11	In Search of Trustworthy and Transparent Intelligent Systems With Human-Like Cognitive and Reasoning Capabilities. *Frontiers in Robotics and AI*, **2020**, 7, 76	2.8	1
10	Random Thoughts: "Comprehensible & Sustainable" Computational Intelligence [President's Message]. *IEEE Computational Intelligence Magazine*, **2018**, 13, 3-4	5.6	1
9	Finding short structural motifs for re-construction of proteins 3D structure. *Applied Soft Computing Journal*, **2013**, 13, 1214-1221	7.5	1
8	Classification of incomplete data integrating neural networks and evidential reasoning. *Neural Computing and Applications*,1	4.8	1
7	Designing Rule-Based Classifiers with On-Line Feature Selection: A Neuro-fuzzy Approach. *Lecture Notes in Computer Science*, **2002**, 251-259	0.9	0
6	Sensitivity analysis of Takagi Sugeno fuzzy neural network. *Information Sciences*, **2022**, 582, 725-749	7.7	0
5	Unsupervised feature selection via adaptive autoencoder with redundancy control.. *Neural Networks*, **2022**, 150, 87-101	9.1	0
4	METRIC STRUCTURES ON POSSIBILITY DISTRIBUTIONS. *International Journal of General Systems*, **1997**, 25, 389-398	2.1	
3	Image Processing and Computer Vision. *The Handbooks of Fuzzy Sets Series*, **1999**, 547-678		
2	Neural Computing: An Introduction and Some Applications. *IETE Journal of Education Online*, **1994**, 35, 105-125	0.3	
1	Self-Crossover and Its Application to the Traveling Salesman Problem. *Lecture Notes in Computer Science*, **1999**, 326-332	0.9	