Dr Himansu Sekhar Behera

List of Publications by Year
in descending order

125 papers	2,263 citations	304743 22 h-index	265206 42 g-index
136 all docs	136 docs citations	136 times ranked	1745 citing authors

#	Article	IF	Citations
1	A hybridization of an improved particle swarm optimization and gravitational search algorithm for multi-robot path planning. Swarm and Evolutionary Computation, 2016, 28, 14-28.	8.1	210
2	Role of intelligent computing in COVID-19 prognosis: A state-of-the-art review. Chaos, Solitons and Fractals, 2020, 138, 109947.	5.1	142
3	A hybrid ETS–ANN model for time series forecasting. Engineering Applications of Artificial Intelligence, 2017, 66, 49-59.	8.1	133
4	Fuzzy C-Means (FCM) Clustering Algorithm: A Decade Review from 2000 to 2014. Smart Innovation, Systems and Technologies, 2015, , 133-149.	0.6	108
5	A hybrid improved PSO-DV algorithm for multi-robot path planning in a clutter environment. Neurocomputing, 2016, 207, 735-753.	5.9	106
6	Power quality time series data mining using S-transform and fuzzy expert system. Applied Soft Computing Journal, 2010, 10, 945-955.	7.2	98
7	Classification of Diabetes Mellitus Disease (DMD): A Data Mining (DM) Approach. Advances in Intelligent Systems and Computing, 2018, , 539-549.	0.6	60
8	Classification of power quality data using decision tree and chemotactic differential evolution based fuzzy clustering. Swarm and Evolutionary Computation, 2012, 4, 12-24.	8.1	54
9	A novel nature inspired firefly algorithm with higher order neural network: Performance analysis. Engineering Science and Technology, an International Journal, 2016, 19, 197-211.	3.2	53
10	A study on leading machine learning techniques for high order fuzzy time series forecasting. Engineering Applications of Artificial Intelligence, 2020, 87, 103245.	8.1	52
11	Intelligent-based multi-robot path planning inspired by improved classical Q-learning and improved particle swarm optimization with perturbed velocity. Engineering Science and Technology, an International Journal, 2016, 19, 651-669.	3.2	48
12	Advancement from neural networks to deep learning in software effort estimation: Perspective of two decades. Computer Science Review, 2020, 38, 100288.	15.3	48
13	Deep neural network based anomaly detection in Internet of Things network traffic tracking for the applications of future smart cities. Transactions on Emerging Telecommunications Technologies, 2021, 32, e4121.	3.9	46
14	A Novel PSO Based Back Propagation Learning-MLP (PSO-BP-MLP) for Classification. Smart Innovation, Systems and Technologies, 2015, , 461-471.	0.6	45
15	ACFLN: artificial chemical functional link network for prediction of stock market index. Evolving Systems, 2019, 10, 567-592.	3.9	44
16	A novel probabilistic intuitionistic fuzzy set based model for high order fuzzy time series forecasting. Engineering Applications of Artificial Intelligence, 2021, 99, 104136.	8.1	41
17	A novel Chemical Reaction Optimization based Higher order Neural Network (CRO-HONN) for nonlinear classification. Ain Shams Engineering Journal, 2015, 6, 1069-1091.	6.1	37
18	Artificial chemical reaction optimization of neural networks for efficient prediction of stock market indices. Ain Shams Engineering Journal, 2017, 8, 371-390.	6.1	37

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19	A self adaptive harmony search based functional link higher order ANN for non-linear data classification. Neurocomputing, 2016, 179, 69-87.	5.9	36
20	Medical disease analysis using Neuro-Fuzzy with Feature Extraction Model for classification. Informatics in Medicine Unlocked, 2020, 18, 100288.	3.4	35
21	Hybrid chemical reaction based metaheuristic with fuzzy c-means algorithm for optimal cluster analysis. Expert Systems With Applications, 2017, 79, 282-295.	7.6	29
22	Index prediction with neuro-genetic hybrid network: A comparative analysis of performance. , 2012, , .		28
23	An Experimental Analysis of Machine Learning Classification Algorithms on Biomedical Data. Lecture Notes in Electrical Engineering, 2020, , 525-539.	0.4	26
24	Bootstrap aggregation ensemble learning-based reliable approach for software defect prediction by using characterized code feature. Innovations in Systems and Software Engineering, 2021, 17, 355-379.	2.1	24
25	High-Order Fuzzy Time Series Forecasting by Using Membership Values Along with Data and Support Vector Machine. Arabian Journal for Science and Engineering, 2020, 45, 10311-10325.	3.0	22
26	An Adaptive Second Order Neural Network with Genetic-Algorithm-based Training (ASONN-GA) to Forecast the Closing Prices of the Stock Market. , 2020, , 238-256.		21
27	A hybrid elicit teaching learning based optimization with fuzzy c-means (ETLBO-FCM) algorithm for data clustering. Ain Shams Engineering Journal, 2018, 9, 379-393.	6.1	20
28	Exact greedy algorithm based split finding approachÂfor intrusion detection in fog-enabled IoT environment. Journal of Information Security and Applications, 2021, 60, 102866.	2.5	20
29	Optimal Selection of Features Using Artificial Electric Field Algorithm for Classification. Arabian Journal for Science and Engineering, 2021, 46, 8355-8369.	3.0	18
30	An Improved Firefly Fuzzy C-Means (FAFCM) Algorithm for Clustering Real World Data Sets. Smart Innovation, Systems and Technologies, 2014, , 339-348.	0.6	18
31	Time sequence data mining using timeâ€"frequency analysis and soft computing techniques. Applied Soft Computing Journal, 2008, 8, 202-215.	7.2	17
32	A hybrid PSO-GA based Pi sigma neural network (PSNN) with standard back propagation gradient descent learning for classification. , 2014, , .		16
33	A Novel FLANN with a Hybrid PSO and GA Based Gradient Descent Learning for Classification. Advances in Intelligent Systems and Computing, 2015, , 745-754.	0.6	16
34	Efficient financial time series prediction with evolutionary virtual data position exploration. Neural Computing and Applications, 2019, 31, 1053-1074.	5.6	16
35	A Hybrid Neuro-Fuzzy and Feature Reduction Model for Classification. Advances in Fuzzy Systems, 2020, 2020, 1-15.	0.9	15
36	A Honey Bee Mating Optimization Based Gradient Descent Learning â€" FLANN (HBMO-GDL-FLANN) for Classification. Advances in Intelligent Systems and Computing, 2015, , 211-220.	0.6	15

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37	Artificial chemical reaction optimization based neural net for virtual data position exploration for efficient financial time series forecasting. Ain Shams Engineering Journal, 2018, 9, 1731-1744.	6.1	14
38	Covid CT-net: A deep learning framework for COVID-19 prognosis using CT images. Journal of Interdisciplinary Mathematics, 2021, 24, 327-352.	0.7	14
39	Evolutionary Improved Swarm-Based Hybrid K-Means Algorithm for Cluster Analysis. Advances in Intelligent Systems and Computing, 2016, , 343-352.	0.6	14
40	A higher order evolutionary Jordan Pi-Sigma Neural Network with gradient descent learning for classification. , 2014, , .		13
41	A pragmatic ensemble learning approach for effective software effort estimation. Innovations in Systems and Software Engineering, 2022, 18, 283-299.	2.1	13
42	Multiplicative Holts Winter Model for Trend Analysis and Forecasting of COVID-19 Spread in India. SN Computer Science, 2021, 2, 416.	3.6	13
43	Time Series Forecasting using Evolutionary Neural Network. International Journal of Computer Applications, 2013, 75, 13-17.	0.2	13
44	Elitist teachingâ€"learning-based optimization (ETLBO) with higher-order Jordan Pi-sigma neural network: a comparative performance analysis. Neural Computing and Applications, 2018, 30, 1445-1468.	5.6	12
45	Competitive Deep Learning Methods for COVID-19 Detection using X-ray Images. Journal of the Institution of Engineers (India): Series B, 2021, 102, 1177-1190.	1.9	12
46	An improved particle swarm optimization for multi-robot path planning. , 2016, , .		11
47	A Novel Hybrid Differential Evolution-PSNN for Fuzzy Time Series Forecasting. Advances in Intelligent Systems and Computing, 2020, , 675-687.	0.6	11
48	A Harmony Search Based Gradient Descent Learning-FLANN (HS-GDL-FLANN) for Classification. Smart Innovation, Systems and Technologies, 2015, , 525-539.	0.6	10
49	Fluctuation prediction of stock market index by adaptive evolutionary higher order neural networks. International Journal of Swarm Intelligence, 2016, 2, 229.	0.3	10
50	Disease Classification Using Linguistic Neuro-Fuzzy Model. Advances in Intelligent Systems and Computing, 2020, , 45-53.	0.6	10
51	A Multi-step-Ahead Fuzzy Time Series Forecasting by Using Hybrid Chemical Reaction Optimization with Pi-Sigma Higher-Order Neural Network. Advances in Intelligent Systems and Computing, 2020, , 1029-1041.	0.6	10
52	Forecasting foreign exchange rates using CRO based different variants of FLANN and performance analysis. International Journal of Computational Systems Engineering, 2016, 2, 190.	0.2	9
53	An intelligent multi-robot path planning in a dynamic environment using improved gravitational search algorithm. International Journal of Automation and Computing, 2021, 18, 1032-1044.	4.5	9
54	A Global-best Harmony Search based Gradient Descent Learning FLANN (GbHS-GDL-FLANN) for data classification. Egyptian Informatics Journal, 2016, 17, 57-87.	6.8	9

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55	A TLBO based gradient descent learning-functional link higher order ANN: An efficient model for learning from non-linear data. Journal of King Saud University - Computer and Information Sciences, 2018, 30, 120-139.	3.9	9
56	Estimating Software Effort Using Neural Network: An Experimental Investigation. Advances in Intelligent Systems and Computing, 2020, , 165-180.	0.6	9
57	An Improved Swarm Based Hybrid K-Means Clustering for Optimal Cluster Centers. Advances in Intelligent Systems and Computing, 2015, , 545-553.	0.6	9
58	Evaluation of normalization methods on neuro-genetic models for stock index forecasting. , 2012, , .		8
59	Hybridzing chemical reaction optimization and Artificial Neural Network for stock future index forecasting. , 2013, , .		8
60	A Pi-Sigma Higher Order Neural Network for Stock Index Forecasting. Smart Innovation, Systems and Technologies, 2015, , 311-319.	0.6	8
61	A Modified Real Time A* Algorithm and Its Performance Analysis for Improved Path Planning of Mobile Robot. Smart Innovation, Systems and Technologies, 2015, , 221-234.	0.6	8
62	An efficient FLANN model with CRO-based gradient descent learning for classification. International Journal of Business Information Systems, 2016, 21, 73.	0.2	8
63	A Survey on Teaching–Learning-Based Optimization Algorithm: Short Journey from 2011 to 2017. Advances in Intelligent Systems and Computing, 2019, , 739-758.	0.6	8
64	Time Series Forecasting Using Differential Evolution-Based ANN Modelling Scheme. Arabian Journal for Science and Engineering, 2020, 45, 11129-11146.	3.0	8
65	Simple polymerase chain reaction assay to differentiate between fungal and <i>Pythium insidiosum</i> keratitis. Clinical and Experimental Ophthalmology, 2021, 49, 630-632.	2.6	8
66	On Developing and Performance Evaluation of Adaptive Second Order Neural Network With GA-Based Training (ASONN-GA) for Financial Time Series Prediction. Advances in Data Mining and Database Management Book Series, 2018, , 231-263.	0.5	8
67	Particle Swarm Optimization Based Higher Order Neural Network for Classification. Smart Innovation, Systems and Technologies, 2015, , 401-414.	0.6	7
68	Solving nonlinear classification problems with black hole optimisation and higher order Jordan Pi-sigma neural network: a novel approach. International Journal of Computational Systems Engineering, 2016, 2, 236.	0.2	7
69	Role of Soft Computing Techniques in Software Effort Estimation: An Analytical Study. Advances in Intelligent Systems and Computing, 2020, , 807-831.	0.6	7
70	Firefly based ridge polynomial neural network for classification. , 2014, , .		6
71	An improved gravitational search algorithm and its performance analysis for multi-robot path planning. , 2015, , .		6
72	Character Recognition Using Firefly Based Back Propagation Neural Network. Smart Innovation, Systems and Technologies, 2015, , 151-164.	0.6	6

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73	A CRO Based FLANN for Forecasting Foreign Exchange Rates Using FLANN. Smart Innovation, Systems and Technologies, 2015, , 647-664.	0.6	6
74	Efficient forecasting of financial time-series data with virtual adaptive neuro-fuzzy inference system. International Journal of Business Forecasting and Market Intelligence, 2016, 2, 379.	0.2	6
75	Optimizing a Higher Order Neural Network Through Teaching Learning Based Optimization Algorithm. Advances in Intelligent Systems and Computing, 2016, , 57-71.	0.6	6
76	A Non-Probabilistic Neutrosophic Entropy-Based Method For High-Order Fuzzy Time-Series Forecasting. Arabian Journal for Science and Engineering, 0, , 1.	3.0	6
77	A Fog-Based Intelligent Secured IoMT Framework for Early Diabetes Prediction. Internet of Things, 2022, , 199-218.	1.7	6
78	A novel chemical reaction-based clustering and its performance analysis. International Journal of Business Intelligence and Data Mining, 2013, 8, 184.	0.2	5
79	Hybrid Gravitational Search and Particle Swarm Based Fuzzy MLP for Medical Data Classification. Smart Innovation, Systems and Technologies, 2015, , 35-43.	0.6	5
80	Comparison of Performance of Different Functions in Functional Link Artificial Neural Network: A Case Study on Stock Index Forecasting. Smart Innovation, Systems and Technologies, 2015, , 479-487.	0.6	5
81	Higher Order Neural Network and Its Applications: A Comprehensive Survey. Advances in Intelligent Systems and Computing, 2018, , 695-709.	0.6	5
82	A Higher Order Neuro-Fuzzy Time Series Forecasting Model Based on Un-equal Length of Interval. Learning and Analytics in Intelligent Systems, 2020, , 34-45.	0.6	5
83	Fuzzy Time Series Forecasting: A Survey. Advances in Intelligent Systems and Computing, 2020, , 641-651.	0.6	5
84	GA Based Polynomial Neural Network for Data Classification. , 2014, , .		4
85	An Efficient PSO-GA Based Back Propagation Learning-MLP (PSO-GA-BP-MLP) for Classification. Smart Innovation, Systems and Technologies, 2015, , 517-527.	0.6	4
86	Non-Linear Classification using Higher Order Pi-Sigma Neural Network and Improved Particle Swarm Optimization: An Experimental Analysis. Advances in Intelligent Systems and Computing, 2016, , 507-518.	0.6	4
87	Cluster Analysis Using Firefly-Based K-means Algorithm: A Combined Approach. Advances in Intelligent Systems and Computing, 2017, , 55-64.	0.6	4
88	Exploration and incorporation of virtual data positions for efficient forecasting of financial time series. International Journal of Industrial and Systems Engineering, 2017, 26, 42.	0.2	4
89	Chemical Reaction Optimization: A Survey with Application and Challenges. Advances in Intelligent Systems and Computing, 2019, , 507-524.	0.6	4
90	A Hybrid Model of FLANN and Firefly Algorithm for Classification. Advances in Computational Intelligence and Robotics Book Series, 2016, , 491-522.	0.4	4

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91	Adaptive Hybrid Higher Order Neural Networks for Prediction of Stock Market Behavior. Advances in Computational Intelligence and Robotics Book Series, 2016, , 174-191.	0.4	4
92	Adaptive Hybrid Higher Order Neural Networks for Prediction of Stock Market Behavior. , 0, , 553-570.		4
93	A novel hybrid approach for real world data clustering algorithm based on fuzzy C-means and firefly algorithm. International Journal of Fuzzy Computation and Modelling, 2015, 1, 431.	0.1	3
94	Evolving Low Complex Higher Order Neural Network Based Classifiers for Medical Data Classification. Advances in Intelligent Systems and Computing, 2016, , 415-425.	0.6	3
95	A comprehensive study on evolutionary algorithmâ€based multilayer perceptron for realâ€world data classification under uncertainty. Expert Systems, 2019, 36, e12327.	4.5	3
96	Multi-Step-Ahead Exchange Rate Forecasting For South Asian Countries Using Multi-Verse Optimized Multiplicative Functional Link Neural Networks. Karbala International Journal of Modern Science, 2021, 7, .	1.0	3
97	Fuzzy Clustering with Improved Swarm Optimization and Genetic Algorithm: Hybrid Approach. Advances in Intelligent Systems and Computing, 2017, , 237-247.	0.6	3
98	Chemical reaction optimisation: a hybrid technique applied to functional link artificial neural networks with least mean square learning for foreign exchange rates forecasting. International Journal of Swarm Intelligence, 2016, 2, 254.	0.3	3
99	Fluctuation prediction of stock market index by adaptive evolutionary higher order neural networks. International Journal of Swarm Intelligence, 2016, 2, 229.	0.3	3
100	Cooperative optimization for efficient financial time series forecasting. , 2014, , .		2
101	An Integrated Clustering Framework Using Optimized K-means with Firefly and Canopies. Smart Innovation, Systems and Technologies, 2015, , 333-343.	0.6	2
102	A hybrid CRO-based FLANN for financial stock market forecasting. International Journal of Data Analysis Techniques and Strategies, 2016, 8, 261.	0.2	2
103	A Fuzzy Filter Based Hybrid ARIMA-ANN Model for Time Series Forecasting. Advances in Intelligent Systems and Computing, 2018, , 592-601.	0.6	2
104	An Adaptive Fuzzy Filter-Based Hybrid ARIMA-HONN Model for Time Series Forecasting. Advances in Intelligent Systems and Computing, 2019, , 841-850.	0.6	2
105	Pi-Sigma Neural Network: Survey of a Decade Progress. Advances in Intelligent Systems and Computing, 2020, , 429-441.	0.6	2
106	Forecasting foreign exchange rates using CRO based different variants of FLANN and performance analysis. International Journal of Computational Systems Engineering, 2016, 2, 190.	0.2	2
107	Towards Designing and Performance Analysis of Evolving Higher Order Neural Networks for Modeling and Forecasting Exchange Rate Time Series Data. Lecture Notes in Electrical Engineering, 2020, , 258-268.	0.4	2
108	Improving Performance of Higher Order Neural Network using Artificial Chemical Reaction Optimization. , 0, , 1753-1780.		2

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109	Correlation-based modified long short-term memory network approach for software defect prediction. Evolving Systems, 2022, 13, 869-887.	3.9	2
110	Robust signal processing compression for clustering of speech waveform and image spectrum. , 2015, , .		1
111	A modified fruit fly optimisation for classification of financial distress using FLANN. International Journal of Data Science, 2017, 2, 155.	0.1	1
112	Time Series Forecasting using a hybrid Jaya-FLANN model. , 2018, , .		1
113	Escalation of Prediction Accuracy With Virtual Data. Advances in Computational Intelligence and Robotics Book Series, 2018, , 433-461.	0.4	1
114	Deep DenseNet and ResNet Approach for COVID-19 Prognosis: Experiments on Real CT Images. Advances in Intelligent Systems and Computing, 2022, , 731-747.	0.6	1
115	Extreme Learning With Metaheuristic Optimization for Exchange Rate Forecasting. International Journal of Swarm Intelligence Research, 2022, 13, 1-25.	0.7	1
116	Comparative performance analysis of proposed variants of list accessing algorithms using centralized cost model with doublylinked list. , 2010, , .		0
117	Chemical reaction optimisation: a hybrid technique applied to functional link artificial neural networks with least mean square learning for foreign exchange rates forecasting. International Journal of Swarm Intelligence, 2016, 2, 254.	0.3	0
118	An improved harmony search-based functional link higher order ANN for nonlinear data classification. International Journal of Intelligent Systems Design and Computing, 2017, 1, 286.	0.7	0
119	HOG Based Radial Basis Function Network for Brain MR Image Classification. Smart Innovation, Systems and Technologies, 2015, , 45-56.	0.6	0
120	Hybrid CRO Based FLANN for Financial Credit Risk Forecasting. Smart Innovation, Systems and Technologies, 2015, , 57-65.	0.6	0
121	A hybrid CRO-based FLANN for financial stock market forecasting. International Journal of Data Analysis Techniques and Strategies, 2016, 8, 261.	0.2	0
122	Solving nonlinear classification problems with black hole optimisation and higher order Jordan Pi-sigma neural network: a novel approach. International Journal of Computational Systems Engineering, 2016, 2, 236.	0.2	0
123	Efficient forecasting of financial time-series data with virtual adaptive neuro-fuzzy inference system. International Journal of Business Forecasting and Market Intelligence, 2016, 2, 379.	0.2	0
124	An improved harmony search-based functional link higher order ANN for nonlinear data classification. International Journal of Intelligent Systems Design and Computing, 2017, 1, 286.	0.7	0
125	A modified fruit fly optimisation for classification of financial distress using FLANN. International Journal of Data Science, 2017, 2, 155.	0.1	0