Nathalie Japkowicz

List of Publications by Year
in descending order

48 papers	5,083 citations	394421 19 h-index	434195 31 g-index
48 all docs	48 docs citations	48 times ranked	4772 citing authors

#	Article	IF	Citations
1	The class imbalance problem: A systematic study1. Intelligent Data Analysis, 2002, 6, 429-449.	0.9	2,292
2	A Multiple Resampling Method for Learning from Imbalanced Data Sets. Computational Intelligence, 2004, 20, 18-36.	3.2	772
3	Class imbalances versus small disjuncts. SIGKDD Explorations: Newsletter of the Special Interest Group (SIG) on Knowledge Discovery & Data Mining, 2004, 6, 40-49.	4.0	542
4	Anomaly Detection in Automobile Control Network Data with Long Short-Term Memory Networks. , 2016, , .		246
5	Boosting support vector machines for imbalanced data sets. Knowledge and Information Systems, 2010, 25, 1-20.	3.2	196
6	Nonlinear Autoassociation Is Not Equivalent to PCA. Neural Computation, 2000, 12, 531-545.	2.2	132
7	Supervised Versus Unsupervised Binary-Learning by Feedforward Neural Networks. Machine Learning, 2001, 42, 97-122.	5.4	121
8	A Feature Selection and Evaluation Scheme for Computer Virus Detection. , 2006, , .		67
9	Unknown malcode detection and the imbalance problem. Journal in Computer Virology, 2009, 5, 295-308.	1.9	61
10	One-Class versus Binary Classification: Which and When?. , 2012, , .		54
11	Synthetic Oversampling with the Majority Class: A New Perspective on Handling Extreme Imbalance. , 2018, , .		49
12	Manifold-based synthetic oversampling with manifold conformance estimation. Machine Learning, 2018, 107, 605-637.	5.4	45
13	Anomaly Detection and Repair for Accurate Predictions in Geo-distributed Big Data. Big Data Research, 2019, 16, 18-35.	4.2	44
14	Research on unsupervised feature learning for Android malware detection based on Restricted Boltzmann Machines. Future Generation Computer Systems, 2021, 120, 91-108.	7.5	40
15	Scalable auto-encoders for gravitational waves detection from time series data. Expert Systems With Applications, 2020, 151, 113378.	7.6	37
16	ECHAD: Embedding-Based Change Detection From Multivariate Time Series in Smart Grids. IEEE Access, 2020, 8, 156053-156066.	4.2	36
17	Framework for extreme imbalance classification: SWIMâ€"sampling with the majority class. Knowledge and Information Systems, 2020, 62, 841-866.	3.2	31
18	Spark-GHSOM: Growing Hierarchical Self-Organizing Map for large scale mixed attribute datasets. Information Sciences, 2019, 496, 572-591.	6.9	29

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19	Threaded ensembles of autoencoders for stream learning. Computational Intelligence, 2018, 34, 261-281.	3.2	28
20	On the joint-effect of class imbalance and overlap: a critical review. Artificial Intelligence Review, 2022, 55, 6207-6275.	15.7	27
21	Parallelizing Feature Selection. Algorithmica, 2006, 45, 433-456.	1.3	25
22	Mobile app traffic flow feature extraction and selection for improving classification robustness. Journal of Network and Computer Applications, 2019, 125, 190-208.	9.1	25
23	Warning: statistical benchmarking is addictive. Kicking the habit in machine learning. Journal of Experimental and Theoretical Artificial Intelligence, 2010, 22, 67-80.	2.8	24
24	Adaptive learning on mobile network traffic data. Connection Science, 2019, 31, 185-214.	3.0	16
25	A statistical pattern based feature extraction method on system call traces for anomaly detection. Information and Software Technology, 2020, 126, 106348.	4.4	16
26	Adaptive Threshold for Outlier Detection on Data Streams. , 2018, , .		15
27	Learning over subconcepts: Strategies for 1â€class classification. Computational Intelligence, 2018, 34, 440-467.	3.2	13
28	Fuzzy String Matching with a Deep Neural Network. Applied Artificial Intelligence, 2018, 32, 1-12.	3.2	11
29	Undersampling with Support Vectors for Multi-Class Imbalanced Data Classification. , 2021, , .		10
30	One-class classification â€" From theory to practice: A case-study in radioactive threat detection. Expert Systems With Applications, 2018, 108, 223-232.	7.6	9
31	Automated Approach To Classification Of Mine-Like Objects Using Multiple-Aspect Sonar Images. Journal of Artificial Intelligence and Soft Computing Research, 2014, 4, 133-148.	4.3	9
32	Spatially-Aware Autoencoders for Detecting Contextual Anomalies in Geo-Distributed Data. Lecture Notes in Computer Science, 2021, , 461-471.	1.3	9
33	Machine learning for radioxenon event classification for the Comprehensive Nuclear-Test-Ban Treaty. Journal of Environmental Radioactivity, 2010, 101, 68-74.	1.7	8
34	Deep Learning Versus Conventional Learning in Data Streams with Concept Drifts. , 2019, , .		7
35	CPDGA: Change point driven growing auto-encoder for lifelong anomaly detection. Knowledge-Based Systems, 2022, 247, 108756.	7.1	7
36	WATCH: Wasserstein Change Point Detection for High-Dimensional Time Series Data. , 2021, , .		6

#	Article	IF	Citations
37	Pattern and Anomaly Localization in Complex and Dynamic Data. , 2019, , .		5
38	One-Class Ensembles for Rare Genomic Sequences Identification. Lecture Notes in Computer Science, 2020, , 340-354.	1.3	5
39	Multi-class learning using data driven ECOC with deep search and re-balancing. , 2015, , .		4
40	Motivating the inclusion of meteorological indicators in the CTBT feature-space. , 2011, , .		2
41	Meta-Morisita Index: Anomaly Behaviour Detection for Large Scale Tracking Data with Spatio-Temporal Marks. , 2017, , .		2
42	Chest Tube Management After Lung Resection Surgery using a Classifier. , 2019, , .		2
43	A sub-concept-based feature selection method for one-class classification. Soft Computing, 2020, 24, 7047-7062.	3.6	2
44	Guest Editorial Special Issue on Recent Advances in Theory, Methodology, and Applications of Imbalanced Learning. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 2688-2690.	11.3	1
45	The validation of chest tube management after lung resection surgery using a random forest classifier. International Journal of Data Science and Analytics, 2022, 13, 251-263.	4.1	1
46	Special issue on discovery science. Machine Learning, 2017, 106, 741-743.	5.4	0
47	Morton-PELT: Efficient De-Noising Spatial-Change Point Detection for Large Scale Normalized Digital Elevation Model Data Set. , 2019, , .		0
48	Subconcept Based One Class Classification Method with Cluster Updating. , 2020, , .		0