J S Snchez

List of Publications by Citations

103 papers	2,771 citations	28 h-index	51 g-index
115 ext. papers	3,269 ext. citations	2.7 avg, IF	5.35 L-index

#	Paper	IF	Citations
103	Strategies for learning in class imbalance problems. *Pattern Recognition*, **2003**, 36, 849-851	7.7	360
102	On the effectiveness of preprocessing methods when dealing with different levels of class imbalance. *Knowledge-Based Systems*, **2012**, 25, 13-21	7.3	193
101	New Applications of Ensembles of Classifiers. *Pattern Analysis and Applications*, **2003**, 6, 245-256	2.3	176
100	On the k-NN performance in a challenging scenario of imbalance and overlapping. *Pattern Analysis and Applications*, **2008**, 11, 269-280	2.3	139
99	Prototype selection for the nearest neighbour rule through proximity graphs. *Pattern Recognition Letters*, **1997**, 18, 507-513	4.7	132
98	Analysis of new techniques to obtain quality training sets. *Pattern Recognition Letters*, **2003**, 24, 1015-1022	4.7	123
97	On the suitability of resampling techniques for the class imbalance problem in credit scoring. *Journal of the Operational Research Society*, **2013**, 64, 1060-1070	2	90
96	The Imbalanced Training Sample Problem: Under or over Sampling?. *Lecture Notes in Computer Science*, **2004**, 806-814	0.9	80
95	Exploring the behaviour of base classifiers in credit scoring ensembles. *Expert Systems With Applications*, **2012**, 39, 10244-10250	7.8	77
94	Two-level classifier ensembles for credit risk assessment. *Expert Systems With Applications*, **2012**, 39, 10916-10922	7.8	68
93	High training set size reduction by space partitioning and prototype abstraction. *Pattern Recognition*, **2004**, 37, 1561-1564	7.7	66
92	A literature review on the application of evolutionary computing to credit scoring. *Journal of the Operational Research Society*, **2013**, 64, 1384-1399	2	65
91	An analysis of how training data complexity affects the nearest neighbor classifiers. *Pattern Analysis and Applications*, **2007**, 10, 189-201	2.3	64
90	On the use of neighbourhood-based non-parametric classifiers. *Pattern Recognition Letters*, **1997**, 18, 1179-1186	4.7	61
89	Experimental study on prototype optimisation algorithms for prototype-based classification in vector spaces. *Pattern Recognition*, **2006**, 39, 1827-1838	7.7	56
88	Nearest Neighbour Editing and Condensing Tools-Synergy Exploitation. *Pattern Analysis and Applications*, **2000**, 3, 19-30	2.3	55
87	Exploring the synergetic effects of sample types on the performance of ensembles for credit risk and corporate bankruptcy prediction. *Information Fusion*, **2019**, 47, 88-101	16.7	54

86	Index of Balanced Accuracy: A Performance Measure for Skewed Class Distributions. *Lecture Notes in Computer Science*, **2009**, 441-448	0.9	53
85	Eliminating redundancy and irrelevance using a new MLP-based feature selection method. *Pattern Recognition*, **2006**, 39, 313-315	7.7	51
84	An insight into the experimental design for credit risk and corporate bankruptcy prediction systems. *Journal of Intelligent Information Systems*, **2015**, 44, 159-189	2.1	45
83	DECISION BOUNDARY PRESERVING PROTOTYPE SELECTION FOR NEAREST NEIGHBOR CLASSIFICATION. *International Journal of Pattern Recognition and Artificial Intelligence*, **2005**, 19, 787-806	1.1	44
82	Financial distress prediction using the hybrid associative memory with translation. *Applied Soft Computing Journal*, **2016**, 44, 144-152	7.5	43
81	Data Characterization for Effective Prototype Selection. *Lecture Notes in Computer Science*, **2005**, 27-34	0.9	34
80	Using regression models for predicting the product quality in a tubing extrusion process. *Journal of Intelligent Manufacturing*, **2019**, 30, 2535-2544	6.7	32
79	Surrounding neighborhood-based SMOTE for learning from imbalanced data sets. *Progress in Artificial Intelligence*, **2012**, 1, 347-362	4	30
78	Band Selection in Multispectral Images by Minimization of Dependent Information. *IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews*, **2007**, 37, 258-267		30
77	A Stochastic Approach to Wilson□ Editing Algorithm. *Lecture Notes in Computer Science*, **2005**, 35-42	0.9	29
76	Mapping microarray gene expression data into dissimilarity spaces for tumor classification. *Information Sciences*, **2015**, 294, 362-375	7.7	28
75	Theoretical Analysis of a Performance Measure for Imbalanced Data **2010**,		28
74	Cluster validation using information stability measures. *Pattern Recognition Letters*, **2010**, 31, 454-461	4.7	27
73	Understanding the apparent superiority of over-sampling through an analysis of local information for class-imbalanced data. *Expert Systems With Applications*, **2020**, 158, 113026	7.8	26
72	Improving the k-NCN classification rule through heuristic modifications. *Pattern Recognition Letters*, **1998**, 19, 1165-1170	4.7	21
71	Combined Effects of Class Imbalance and Class Overlap on Instance-Based Classification. *Lecture Notes in Computer Science*, **2006**, 371-378	0.9	19
70	Online reconstruction-free single-pixel image classification. *Image and Vision Computing*, **2019**, 86, 28-37	3.7	18
69	On the use of data filtering techniques for credit risk prediction with instance-based models. *Expert Systems With Applications*, **2012**, 39, 13267-13276	7.8	18

68	A bias correction function for classification performance assessment in two-class imbalanced problems. *Knowledge-Based Systems*, **2014**, 59, 66-74	7.3	17
67	Nearest Neighbour Classifiers for Streaming Data with Delayed Labelling **2008**,		17
66	Improving the Performance of the RBF Neural Networks Trained with Imbalanced Samples **2007**, 162-169		16
65	An LVQ-based adaptive algorithm for learning from very small codebooks. *Neurocomputing*, **2006**, 69, 922-927	5.4	15
64	Dynamic and Static Weighting in Classifier Fusion. *Lecture Notes in Computer Science*, **2005**, 59-66	0.9	15
63	A very high level interface to teleoperate a robot via Web including augmented reality		15
62	Ranking-based MCDM models in financial management applications: analysis and emerging challenges. *Progress in Artificial Intelligence*, **2020**, 9, 171-193	4	11
61	Dissimilarity-Based Linear Models for Corporate Bankruptcy Prediction. *Computational Economics*, **2019**, 53, 1019-1031	1.4	11
60	Associative learning on imbalanced environments: An empirical study. *Expert Systems With Applications*, **2016**, 54, 387-397	7.8	10
59	DBIG-US: A two-stage under-sampling algorithm to face the class imbalance problem. *Expert Systems With Applications*, **2021**, 168, 114301	7.8	10
58	Exploring the Performance of Resampling Strategies for the Class Imbalance Problem. *Lecture Notes in Computer Science*, **2010**, 541-549	0.9	9
57	Including efficient object recognition capabilities in online robots: from a statistical to a Neural-network classifier. *IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews*, **2005**, 35, 87-96		8
56	Restricted Decontamination for the Imbalanced Training Sample Problem. *Lecture Notes in Computer Science*, **2003**, 424-431	0.9	8
55	When Overlapping Unexpectedly Alters the Class Imbalance Effects. *Lecture Notes in Computer Science*, **2007**, 499-506	0.9	8
54	A New Under-Sampling Method to Face Class Overlap and Imbalance. *Applied Sciences (Switzerland)*, **2020**, 10, 5164	2.6	8
53	Using the Geometrical Distribution of Prototypes for Training Set Condensing. *Lecture Notes in Computer Science*, **2004**, 618-627	0.9	7
52	Class-dependant resampling for medical applications		7
51	Combining Multiple Classifiers with Dynamic Weighted Voting. *Lecture Notes in Computer Science*, **2009**, 510-516	0.9	7

50	Gene selection and disease prediction from gene expression data using a two-stage hetero-associative memory. *Progress in Artificial Intelligence*, **2019**, 8, 63-71	4	7
49	Non Parametric Local Density-Based Clustering for Multimodal Overlapping Distributions. *Lecture Notes in Computer Science*, **2006**, 671-678	0.9	7
48	Making Accurate Credit Risk Predictions with Cost-Sensitive MLP Neural Networks. *Advances in Intelligent Systems and Computing*, **2013**, 1-8	0.4	6
47	Improving Risk Predictions by Preprocessing Imbalanced Credit Data. *Lecture Notes in Computer Science*, **2012**, 68-75	0.9	6
46	Object recognition and incremental learning algorithms for a web-based telerobotic system		6
45	Performance evaluation of prototype selection algorithms for nearest neighbor classification		6
44	A New Performance Evaluation Method for Two-Class Imbalanced Problems. *Lecture Notes in Computer Science*, **2008**, 917-925	0.9	6
43	Performance Analysis of Deep Neural Networks for Classification of Gene-Expression Microarrays. *Lecture Notes in Computer Science*, **2018**, 105-115	0.9	5
42	Designing serious games for learning support in medicine studies: A specific method to elicit and formalize requirements **2014**,		5
41	Non-parametric Statistical Analysis of Machine Learning Methods for Credit Scoring. *Advances in Intelligent Systems and Computing*, **2012**, 263-272	0.4	5
40	A regression model based on the nearest centroid neighborhood. *Pattern Analysis and Applications*, **2018**, 21, 941-951	2.3	4
39	Dissimilarity-based classification of data with missing attributes **2010**,		4
38			4
37	An Insight on the □arge G, Small n□Problem in Gene-Expression Microarray Classification. *Lecture Notes in Computer Science*, **2017**, 483-490	0.9	4
36	Learning from Imbalanced Sets through Resampling and Weighting. *Lecture Notes in Computer Science*, **2003**, 80-88	0.9	4
35	Performance Analysis of Classifier Ensembles: Neural Networks Versus Nearest Neighbor Rule. *Lecture Notes in Computer Science*, **2007**, 105-112	0.9	4
34	Classification of High Dimensional and Imbalanced Hyperspectral Imagery Data. *Lecture Notes in Computer Science*, **2011**, 644-651	0.9	4
33	Clustering Based on Compressed Data for Categorical and Mixed Attributes. *Lecture Notes in Computer Science*, **2006**, 817-825	0.9	4

32	Improving the Classification Accuracy of RBF and MLP Neural Networks Trained with Imbalanced Samples. *Lecture Notes in Computer Science*, **2006**, 464-471	0.9	4
31	On-line learning from streaming data with delayed attributes: a comparison of classifiers and strategies. *Neural Computing and Applications*, **2011**, 20, 935-944	4.8	3
30	A meta-learning framework for pattern classification by means of data complexity measures. *Inteligencia Artificial*, **2006**, 10,	1.5	3
29	Assessment of Financial Risk Prediction Models with Multi-criteria Decision Making Methods. *Lecture Notes in Computer Science*, **2012**, 60-67	0.9	3
28	Synergetic Application of Multi-Criteria Decision-Making Models to Credit Granting Decision Problems. *Applied Sciences (Switzerland)*, **2019**, 9, 5052	2.6	3
27	Enhanced Neighbourhood Specifications for Pattern Classification. *Combinatorial Optimization*, **2003**, 673-702		3
26	Dissimilarity-Based Learning from Imbalanced Data with Small Disjuncts and Noise. *Lecture Notes in Computer Science*, **2015**, 370-378	0.9	2
25	Ensembles of Multilayer Perceptron and Modular Neural Networks for Fast and Accurate Learning **2006**,		2
24	Exploring Early Classification Strategies of Streaming Data with Delayed Attributes. *Lecture Notes in Computer Science*, **2009**, 875-883	0.9	2
23	Human Recognition Based on Gait Poses. *Lecture Notes in Computer Science*, **2011**, 347-354	0.9	2
22	Exploring Synergetic Effects of Dimensionality Reduction and Resampling Tools on Hyperspectral Imagery Data Classification. *Lecture Notes in Computer Science*, **2011**, 511-523	0.9	2
21	Hybrid Associative Memories for Imbalanced Data Classification: An Experimental Study. *Lecture Notes in Computer Science*, **2013**, 325-334	0.9	2
20	Gender Classification from Pose-Based GEIs. *Lecture Notes in Computer Science*, **2012**, 501-508	0.9	2
19	Mathematical Methodologies in Pattern Recognition and Machine Learning. *Springer Proceedings in Mathematics and Statistics*, **2013**,	0.2	1
18	GUEST EDITORIAL PATTERN RECOGNITION AND IMAGE ANALYSIS IN CYBERNETIC APPLICATIONS. *Cybernetics and Systems*, **2004**, 35, 1-2	1.9	1
17	A Voronoi-diagram-based approach to oblique decision tree induction		1
16	Influence of Resampling and Weighting on Diversity and Accuracy of Classifier Ensembles. *Lecture Notes in Computer Science*, **2007**, 250-257	0.9	1
15	Cluster Stability Assessment Based on Theoretic Information Measures. *Lecture Notes in Computer Science*, **2008**, 219-226	0.9	1

14	One-Sided Prototype Selection on Class Imbalanced Dissimilarity Matrices. *Lecture Notes in Computer Science*, **2012**, 391-399	0.9	1
13	Instance Selection Methods and Resampling Techniques for Dissimilarity Representation with Imbalanced Data Sets. *Advances in Intelligent Systems and Computing*, **2013**, 149-160	0.4	1
12	Model Selection for Financial Distress Prediction by Aggregating TOPSIS and PROMETHEE Rankings. *Lecture Notes in Computer Science*, **2016**, 524-535	0.9	1
11	On Filtering the Training Prototypes in Nearest Neighbour Classification. *Lecture Notes in Computer Science*, **2002**, 239-248	0.9	1
10	Data Reduction Method for Categorical Data Clustering. *Lecture Notes in Computer Science*, **2008**, 143-152	0.9	0
9	Graphical Framework for Categorizing Data Capabilities and Properties of Objects in the Internet of Things. *IEEE Access*, **2020**, 8, 22366-22377	3.5	
8	Special Issue on Pattern Recognition for Autonomous Manipulation in Robotic Systems. *IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews*, **2005**, 35, 1-3		
7	Revisiting the Dissimilarity Representation in the Context of Regression. *IEEE Access*, **2021**, 9, 157043-157051	3.9	
6	Identifying Optimal Clusters in Purchase Transaction Data. *Lecture Notes in Computer Science*, **2021**, 3-22	0.9	
5	Using the Dual of Proximity Graphs for Binary Decision Tree Design. *Lecture Notes in Computer Science*, **2000**, 482-490	0.9	
4	On the Use of Different Classification Rules in an Editing Task. *Lecture Notes in Computer Science*, **2006**, 747-754	0.9	
3	Learning and Forgetting with Local Information of New Objects. *Lecture Notes in Computer Science*, **2008**, 261-268	0.9	
2	A Cluster-Based Under-Sampling Algorithm for Class-Imbalanced Data. *Lecture Notes in Computer Science*, **2020**, 299-311	0.9	
1	On-Line Classification of Data Streams with Missing Values Based on Reinforcement Learning. *Lecture Notes in Computer Science*, **2011**, 355-362	0.9	