

Jesus Alcalá-Fdez

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/5358440/jesus-alcala-fdez-publications-by-year.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

119
papers

7,554
citations

35
h-index

86
g-index

127
ext. papers

9,771
ext. citations

5
avg, IF

6.42
L-index

#	Paper	IF	Citations
119	Mining high average-utility sequential rules to identify high-utility gene expression sequences in longitudinal human studies. <i>Expert Systems With Applications</i> , 2022 , 193, 116411	7.8	0
118	Human Multi-omics Data Pre-processing for Predictive Purposes Using Machine Learning: A Case Study in Childhood Obesity. <i>Lecture Notes in Computer Science</i> , 2022 , 359-374	0.9	0
117	Gene Expression Profiles of Visceral and Subcutaneous Adipose Tissues in Children with Overweight or Obesity: The KIDADIPOSEQ Project. <i>Lecture Notes in Computer Science</i> , 2022 , 42-46	0.9	0
116	Omics Approaches in Adipose Tissue and Skeletal Muscle Addressing the Role of Extracellular Matrix in Obesity and Metabolic Dysfunction. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	7
115	Fuzzy k-nearest neighbors with monotonicity constraints: Moving towards the robustness of monotonic noise. <i>Neurocomputing</i> , 2021 , 439, 106-121	5.4	6
114	SOUL: Scala Oversampling and Undersampling Library for imbalance classification. <i>SoftwareX</i> , 2021 , 15, 100767	2.7	0
113	Synthetic Sample Generation for Label Distribution Learning. <i>Information Sciences</i> , 2021 , 544, 197-213	7.7	3
112	A tutorial on distance metric learning: Mathematical foundations, algorithms, experimental analysis, prospects and challenges. <i>Neurocomputing</i> , 2021 , 425, 300-322	5.4	29
111	EUSC: A clustering-based surrogate model to accelerate evolutionary undersampling in imbalanced classification. <i>Applied Soft Computing Journal</i> , 2021 , 101, 107033	7.5	6
110	Distance Metric Learning with Prototype Selection for Imbalanced Classification. <i>Lecture Notes in Computer Science</i> , 2021 , 391-402	0.9	1
109	Enhancing instance-level constrained clustering through differential evolution. <i>Applied Soft Computing Journal</i> , 2021 , 108, 107435	7.5	2
108	ME-MEOA/DCC: Multiobjective constrained clustering through decomposition-based memetic elitism. <i>Swarm and Evolutionary Computation</i> , 2021 , 66, 100939	9.8	1
107	Temporal association rule mining: An overview considering the time variable as an integral or implied component. <i>Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery</i> , 2020 , 10, e1367	6.9	4
106	Evaluation of the Predictive Ability, Environmental Regulation and Pharmacogenetics Utility of a BMI-Predisposing Genetic Risk Score during Childhood and Puberty. <i>Journal of Clinical Medicine</i> , 2020 , 9,	5.1	1
105	ProLSFEO-LDL: Prototype Selection and Label-Specific Feature Evolutionary Optimization for Label Distribution Learning. <i>Applied Sciences (Switzerland)</i> , 2020 , 10, 3089	2.6	3
104	DILS: Constrained clustering through dual iterative local search. <i>Computers and Operations Research</i> , 2020 , 121, 104979	4.6	5
103	Improving constrained clustering via decomposition-based multiobjective optimization with memetic elitism 2020 ,		1

102	Agglomerative Constrained Clustering Through Similarity and Distance Recalculation. <i>Lecture Notes in Computer Science</i> , 2020 , 424-436	0.9	
101	Data Reduction for Big Data 2020 , 81-99		1
100	Explainable Artificial Intelligence (XAI): Concepts, taxonomies, opportunities and challenges toward responsible AI. <i>Information Fusion</i> , 2020 , 58, 82-115	16.7	1210
99	A practical tutorial on bagging and boosting based ensembles for machine learning: Algorithms, software tools, performance study, practical perspectives and opportunities. <i>Information Fusion</i> , 2020 , 64, 205-237	16.7	46
98	Fast and Scalable Approaches to Accelerate the Fuzzy k-Nearest Neighbors Classifier for Big Data. <i>IEEE Transactions on Fuzzy Systems</i> , 2020 , 28, 874-886	8.3	17
97	eXplainable Artificial Intelligence (XAI) for the identification of biologically relevant gene expression patterns in longitudinal human studies, insights from obesity research. <i>PLoS Computational Biology</i> , 2020 , 16, e1007792	5	20
96	eXplainable Artificial Intelligence (XAI) for the identification of biologically relevant gene expression patterns in longitudinal human studies, insights from obesity research 2020 , 16, e1007792		
95	eXplainable Artificial Intelligence (XAI) for the identification of biologically relevant gene expression patterns in longitudinal human studies, insights from obesity research 2020 , 16, e1007792		
94	eXplainable Artificial Intelligence (XAI) for the identification of biologically relevant gene expression patterns in longitudinal human studies, insights from obesity research 2020 , 16, e1007792		
93	eXplainable Artificial Intelligence (XAI) for the identification of biologically relevant gene expression patterns in longitudinal human studies, insights from obesity research 2020 , 16, e1007792		
92	Smartdata: Data preprocessing to achieve smart data in R. <i>Neurocomputing</i> , 2019 , 360, 1-13	5.4	8
91	Label noise filtering techniques to improve monotonic classification. <i>Neurocomputing</i> , 2019 , 353, 83-95	5.4	5
90	Monotonic classification: An overview on algorithms, performance measures and data sets. <i>Neurocomputing</i> , 2019 , 341, 168-182	5.4	24
89	Instance reduction for one-class classification. <i>Knowledge and Information Systems</i> , 2019 , 59, 601-628	2.4	16
88	Experimental Study on 164 Algorithms Available in Software Tools for Solving Standard Non-Linear Regression Problems. <i>IEEE Access</i> , 2019 , 7, 108916-108939	3.5	7
87	From Big to Smart Data: Iterative ensemble filter for noise filtering in Big Data classification. <i>International Journal of Intelligent Systems</i> , 2019 , 34, 3260-3274	8.4	7
86	Py4JFML: A Python wrapper for using the IEEE Std 1855-2016 through JFML 2019 ,		6
85	A snapshot on nonstandard supervised learning problems: taxonomy, relationships, problem transformations and algorithm adaptations. <i>Progress in Artificial Intelligence</i> , 2019 , 8, 1-14	4	23

84	Transforming big data into smart data: An insight on the use of the k-nearest neighbors algorithm to obtain quality data. <i>Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery</i> , 2019 , 9, e1289	6.9	30
83	Chain based sampling for monotonic imbalanced classification. <i>Information Sciences</i> , 2019 , 474, 187-204	7.7	15
82	DRCW-ASEG: One-versus-One distance-based relative competence weighting with adaptive synthetic example generation for multi-class imbalanced datasets. <i>Neurocomputing</i> , 2018 , 285, 176-187	5.4	20
81	Dynamic ensemble selection for multi-class imbalanced datasets. <i>Information Sciences</i> , 2018 , 445-446, 22-37	7.7	80
80	Evolutionary data mining and applications: A revision on the most cited papers from the last 10 years (2007-2017). <i>Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery</i> , 2018 , 8, e1239	6.9	4
79	MRQAR: A generic MapReduce framework to discover quantitative association rules in big data problems. <i>Knowledge-Based Systems</i> , 2018 , 153, 176-192	7.3	21
78	On the use of convolutional neural networks for robust classification of multiple fingerprint captures. <i>International Journal of Intelligent Systems</i> , 2018 , 33, 213-230	8.4	44
77	Interoperability for Embedded Systems in JFML Software: An Arduino-based implementation 2018 ,		2
76	A preliminary study on Hybrid Spill-Tree Fuzzy k-Nearest Neighbors for big data classification 2018 ,		2
75	JFML: A Java Library to Design Fuzzy Logic Systems According to the IEEE Std 1855-2016. <i>IEEE Access</i> , 2018 , 6, 54952-54964	3.5	22
74	Imbalance: Oversampling algorithms for imbalanced classification in R. <i>Knowledge-Based Systems</i> , 2018 , 161, 329-341	7.3	29
73	MoNGEL: monotonic nested generalized exemplar learning. <i>Pattern Analysis and Applications</i> , 2017 , 20, 441-452	2.3	8
72	Prototype selection to improve monotonic nearest neighbor. <i>Engineering Applications of Artificial Intelligence</i> , 2017 , 60, 128-135	7.2	16
71	Evolutionary Fuzzy Rule-Based Methods for Monotonic Classification. <i>IEEE Transactions on Fuzzy Systems</i> , 2017 , 25, 1376-1390	8.3	29
70	Nearest Neighbor Classification for High-Speed Big Data Streams Using Spark. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2017 , 47, 2727-2739	7.3	38
69	Exact fuzzy k-nearest neighbor classification for big datasets 2017 ,		12
68	KEEL 3.0: An Open Source Software for Multi-Stage Analysis in Data Mining. <i>International Journal of Computational Intelligence Systems</i> , 2017 , 10, 1238	3.4	122
67	Evolutionary fuzzy k-nearest neighbors algorithm using interval-valued fuzzy sets. <i>Information Sciences</i> , 2016 , 329, 144-163	7.7	53

66	A Survey of Fuzzy Systems Software: Taxonomy, Current Research Trends, and Prospects. <i>IEEE Transactions on Fuzzy Systems</i> , 2016 , 24, 40-56	8.3	55
65	Current prospects on ordinal and monotonic classification. <i>Progress in Artificial Intelligence</i> , 2016 , 5, 171-179	15	
64	Special Issue on Computational Intelligence Software Guest Editorial. <i>IEEE Computational Intelligence Magazine</i> , 2016 , 11, 13-14	5.6	
63	From Big Data to Smart Data with the K-Nearest Neighbours Algorithm 2016 ,		4
62	NICGAR: A Niching Genetic Algorithm to mine a diverse set of interesting quantitative association rules. <i>Information Sciences</i> , 2016 , 355-356, 208-228	7.7	60
61	Landmark-based music recognition system optimisation using genetic algorithms. <i>Multimedia Tools and Applications</i> , 2016 , 75, 16905-16922	2.5	1
60	Data discretization: taxonomy and big data challenge. <i>Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery</i> , 2016 , 6, 5-21	6.9	71
59	Self-labeled techniques for semi-supervised learning: taxonomy, software and empirical study. <i>Knowledge and Information Systems</i> , 2015 , 42, 245-284	2.4	236
58	Genetic learning of the membership functions for mining fuzzy association rules from low quality data. <i>Information Sciences</i> , 2015 , 295, 358-378	7.7	25
57	Data Preprocessing in Data Mining. <i>Intelligent Systems Reference Library</i> , 2015 ,	0.8	270
56	Monotonic Random Forest with an Ensemble Pruning Mechanism based on the Degree of Monotonicity. <i>New Generation Computing</i> , 2015 , 33, 367-388	0.9	29
55	Distributed Entropy Minimization Discretizer for Big Data Analysis under Apache Spark 2015 ,		15
54	A Data Mining Software Package Including Data Preparation and Reduction: KEEL. <i>Intelligent Systems Reference Library</i> , 2015 , 285-313	0.8	2
53	A first attempt on evolutionary prototype reduction for nearest neighbor one-class classification 2014 ,		3
52	On the statistical analysis of the parameters trend in a machine learning algorithm. <i>Progress in Artificial Intelligence</i> , 2014 , 3, 51-53	4	3
51	A New Multiobjective Evolutionary Algorithm for Mining a Reduced Set of Interesting Positive and Negative Quantitative Association Rules. <i>IEEE Transactions on Evolutionary Computation</i> , 2014 , 18, 54-69	15.6	64
50	Analyzing fuzzy association rules with Fingrams in KEEL 2014 ,		4
49	QAR-CIP-NSGA-II: A new multi-objective evolutionary algorithm to mine quantitative association rules. <i>Information Sciences</i> , 2014 , 258, 1-28	7.7	49

48	Statistical analysis of convergence performance throughout the evolutionary search: A case study with SaDE-MMTS and Sa-EPsDE-MMTS 2013 ,		9
47	. <i>IEEE Transactions on Knowledge and Data Engineering</i> , 2013 , 25, 734-750	4.2	284
46	A new fingram-based software tool for visual representation and analysis of fuzzy association rules 2013 ,		4
45	Special Issue on Software Tools for Soft Computing. <i>International Journal of Computational Intelligence Systems</i> , 2013 , 6, 1-2	3.4	7
44	jFuzzyLogic: a Java Library to Design Fuzzy Logic Controllers According to the Standard for Fuzzy Control Programming. <i>International Journal of Computational Intelligence Systems</i> , 2013 , 6, 61-75	3.4	106
43	Interpretability analysis of fuzzy association rules supported by fingrams 2013 ,		2
42	Hybrid laser pointer detection algorithm based on template matching and fuzzy rule-based systems for domotic control in real home environments. <i>Applied Intelligence</i> , 2012 , 36, 407-423	4.9	11
41	Financial time series forecasting with a bio-inspired fuzzy model. <i>Expert Systems With Applications</i> , 2012 , 39, 12302-12309	7.8	16
40	jFuzzyLogic: a robust and flexible Fuzzy-Logic inference system language implementation 2012 ,		78
39	A Taxonomy and Experimental Study on Prototype Generation for Nearest Neighbor Classification. <i>IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews</i> , 2012 , 42, 86-100		171
38	Mining fuzzy association rules from low-quality data. <i>Soft Computing</i> , 2012 , 16, 883-901	3.5	14
37	On the choice of the best imputation methods for missing values considering three groups of classification methods. <i>Knowledge and Information Systems</i> , 2012 , 32, 77-108	2.4	132
36	A multi-objective evolutionary algorithm for mining quantitative association rules 2011 ,		9
35	Fuzzy Autoregressive Rules: Towards Linguistic Time Series Modeling. <i>Econometric Reviews</i> , 2011 , 30, 646-668	1.1	1
34	A Fuzzy Association Rule-Based Classification Model for High-Dimensional Problems With Genetic Rule Selection and Lateral Tuning. <i>IEEE Transactions on Fuzzy Systems</i> , 2011 , 19, 857-872	8.3	203
33	Addressing data complexity for imbalanced data sets: analysis of SMOTE-based oversampling and evolutionary undersampling. <i>Soft Computing</i> , 2011 , 15, 1909-1936	3.5	109
32	Evolutionary learning of a laser pointer detection fuzzy system for an environment control system 2011 ,		3
31	A preliminary study on the use of differential evolution for adjusting the position of examples in nearest neighbor classification 2010 ,		3

30	Analysis of the Effectiveness of the Genetic Algorithms based on Extraction of Association Rules. <i>Fundamenta Informaticae</i> , 2010 , 98, 1-14	1	19
29	Special issue on Hybrid Fuzzy Models. <i>International Journal of Hybrid Intelligent Systems</i> , 2010 , 7, 1-1	0.9	5
28	Genetic tuning of a laser pointer environment control device system for handicapped people with fuzzy systems 2010 ,		4
27	A case study for learning behaviors in mobile robotics by evolutionary fuzzy systems. <i>Expert Systems With Applications</i> , 2010 , 37, 1471-1493	7.8	11
26	Stratified prototype selection based on a steady-state memetic algorithm: a study of scalability. <i>Memetic Computing</i> , 2010 , 2, 183-199	3.4	28
25	Genetics-Based Machine Learning for Rule Induction: State of the Art, Taxonomy, and Comparative Study. <i>IEEE Transactions on Evolutionary Computation</i> , 2010 , 14, 913-941	15.6	106
24	Learning weighted linguistic rules to control an autonomous robot. <i>International Journal of Intelligent Systems</i> , 2009 , 24, 226-251	8.4	12
23	KEEL: a software tool to assess evolutionary algorithms for data mining problems. <i>Soft Computing</i> , 2009 , 13, 307-318	3.5	896
22	Improving fuzzy logic controllers obtained by experts: a case study in HVAC systems. <i>Applied Intelligence</i> , 2009 , 31, 15-30	4.9	39
21	A study on the use of non-parametric tests for analyzing the evolutionary algorithms behaviour: a case study on the CEC2005 Special Session on Real Parameter Optimization. <i>Journal of Heuristics</i> , 2009 , 15, 617-644	1.9	1223
20	Learning the membership function contexts for mining fuzzy association rules by using genetic algorithms. <i>Fuzzy Sets and Systems</i> , 2009 , 160, 905-921	3.7	129
19	Evolutionary undersampling for classification with imbalanced datasets: proposals and taxonomy. <i>Evolutionary Computation</i> , 2009 , 17, 275-306	4.3	230
18	Addressing Data-Complexity for Imbalanced Data-Sets: A Preliminary Study on the Use of Preprocessing for C4.5 2009 ,		3
17	A First Approach to Nearest Hyperrectangle Selection by Evolutionary Algorithms 2009 ,		3
16	Evolutionary Extraction of Association Rules: A Preliminary Study on their Effectiveness. <i>Lecture Notes in Computer Science</i> , 2009 , 646-653	0.9	2
15	Implementation and Integration of Algorithms into the KEEL Data-Mining Software Tool. <i>Lecture Notes in Computer Science</i> , 2009 , 562-569	0.9	0
14	KEEL: A data mining software tool integrating genetic fuzzy systems 2008 ,		8
13	Fuzzy-genetic optimization of the parameters of a low cost system for the optical measurement of several dimensions of vehicles. <i>Soft Computing</i> , 2008 , 12, 751-764	3.5	7

12	A consistency-based procedure to estimate missing pairwise preference values. <i>International Journal of Intelligent Systems</i> , 2008 , 23, 155-175	8.4	218
11	A MULTI-OBJECTIVE GENETIC ALGORITHM FOR TUNING AND RULE SELECTION TO OBTAIN ACCURATE AND COMPACT LINGUISTIC FUZZY RULE-BASED SYSTEMS. <i>International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems</i> , 2007 , 15, 539-557	0.8	92
10	Local identification of prototypes for genetic learning of accurate TSK fuzzy rule-based systems. <i>International Journal of Intelligent Systems</i> , 2007 , 22, 909-941	8.4	39
9	Increasing fuzzy rules cooperation based on evolutionary adaptive inference systems. <i>International Journal of Intelligent Systems</i> , 2007 , 22, 1035-1064	8.4	38
8	Genetic learning of accurate and compact fuzzy rule based systems based on the 2-tuples linguistic representation. <i>International Journal of Approximate Reasoning</i> , 2007 , 44, 45-64	3.6	88
7	Genetic Learning of Membership Functions for Mining Fuzzy Association Rules. <i>IEEE International Conference on Fuzzy Systems</i> , 2007 ,		7
6	Guest Editorial Genetic Fuzzy Systems: What's Next? An Introduction to the Special Section. <i>IEEE Transactions on Fuzzy Systems</i> , 2007 , 15, 533-535	8.3	16
5	A Proposal for the Genetic Lateral Tuning of Linguistic Fuzzy Systems and Its Interaction With Rule Selection. <i>IEEE Transactions on Fuzzy Systems</i> , 2007 , 15, 616-635	8.3	136
4	A Multi-Objective Evolutionary Algorithm for Rule Selection and Tuning on Fuzzy Rule-Based Systems. <i>IEEE International Conference on Fuzzy Systems</i> , 2007 ,		8
3	Hybrid learning models to get the interpretabilityAccuracy trade-off in fuzzy modeling. <i>Soft Computing</i> , 2006 , 10, 717-734	3.5	71
2	Rule Base Reduction and Genetic Tuning of Fuzzy Systems Based on the Linguistic 3-tuples Representation. <i>Soft Computing</i> , 2006 , 11, 401-419	3.5	39
1	Ordinal regression with explainable distance metric learning based on ordered sequences. <i>Machine Learning</i> , ¹	4	1