Francesco Marcelloni

List of Publications by Citations

159 papers	3,398 citations	33 h-index	54 g-index
172 ext. papers	4,152 ext. citations	4.3 avg, IF	5.95 L-index

#	Paper	IF	Citations
159	. *IEEE Transactions on Intelligent Transportation Systems*, **2015**, 16, 2269-2283	6.1	185
158	Patterns and technologies for enabling supply chain traceability through collaborative e-business. *Information and Software Technology*, **2008**, 50, 342-359	3.4	157
157	A survey on fake news and rumour detection techniques. *Information Sciences*, **2019**, 497, 38-55	7.7	136
156	A Multiobjective Evolutionary Approach to Concurrently Learn Rule and Data Bases of Linguistic Fuzzy-Rule-Based Systems. *IEEE Transactions on Fuzzy Systems*, **2009**, 17, 1106-1122	8.3	135
155	A Simple Algorithm for Data Compression in Wireless Sensor Networks. *IEEE Communications Letters*, **2008**, 12, 411-413	3.8	135
154	An Efficient Lossless Compression Algorithm for Tiny Nodes of Monitoring Wireless Sensor Networks. *Computer Journal*, **2009**, 52, 969-987	1.3	114
153	A genetic algorithm for generating optimal assembly plans. *Advanced Engineering Informatics*, **2000**, 14, 319-329		95
152	A Pareto-based multi-objective evolutionary approach to the identification of Mamdani fuzzy systems. *Soft Computing*, **2007**, 11, 1013-1031	3.5	90
151	. *IEEE Computational Intelligence Magazine*, **2019**, 14, 69-81	5.6	90
150	Multi-objective evolutionary design of granular rule-based classifiers. *Granular Computing*, **2016**, 1, 37-58	3.4	84
149	Genetic Training Instance Selection in Multiobjective Evolutionary Fuzzy Systems: A Coevolutionary Approach. *IEEE Transactions on Fuzzy Systems*, **2012**, 20, 276-290	8.3	84
148	Detection of traffic congestion and incidents from GPS trace analysis. *Expert Systems With Applications*, **2017**, 73, 43-56	7.8	83
147	Multi-objective genetic fuzzy classifiers for imbalanced and cost-sensitive datasets. *Soft Computing*, **2010**, 14, 713-728	3.5	82
146	Enabling energy-efficient and lossy-aware data compression in wireless sensor networks by multi-objective evolutionary optimization. *Information Sciences*, **2010**, 180, 1924-1941	7.7	81
145	Context adaptation of fuzzy systems through a multi-objective evolutionary approach based on a novel interpretability index. *Soft Computing*, **2009**, 13, 437-449	3.5	74
144	. *IEEE Transactions on Fuzzy Systems*, **2018**, 26, 174-192	8.3	72
143	A MapReduce solution for associative classification of big data. *Information Sciences*, **2016**, 332, 33-55	7.7	72

142	Multiobjective Evolutionary Optimization of Type-2 Fuzzy Rule-Based Systems for Financial Data Classification. *IEEE Transactions on Fuzzy Systems*, **2017**, 25, 249-264	8.3	66
141	Monitoring the public opinion about the vaccination topic from tweets analysis. *Expert Systems With Applications*, **2019**, 116, 209-226	7.8	60
140	Learning concurrently partition granularities and rule bases of Mamdani fuzzy systems in a multi-objective evolutionary framework. *International Journal of Approximate Reasoning*, **2009**, 50, 1066-1080	3.6	57
139	An intelligent system for detecting faults in photovoltaic fields **2011**,		47
138	An electronic nose for odour annoyance assessment. *Atmospheric Environment*, **2001**, 35, 1225-1234	5.3	47
137	Twitter as a sentinel tool to monitor public opinion on vaccination: an opinion mining analysis from September 2016 to August 2017 in Italy. *Human Vaccines and Immunotherapeutics*, **2020**, 16, 1062-1069	4.4	45
136	A Novel Approach Based on Finite-State Machines with Fuzzy Transitions for Nonintrusive Home Appliance Monitoring. *IEEE Transactions on Industrial Informatics*, **2014**, 10, 1185-1197	11.9	42
135	A fast and efficient multi-objective evolutionary learning scheme for fuzzy rule-based classifiers. *Information Sciences*, **2014**, 283, 36-54	7.7	41
134	Learning knowledge bases of multi-objective evolutionary fuzzy systems by simultaneously optimizing accuracy, complexity and partition integrity. *Soft Computing*, **2011**, 15, 2335-2354	3.5	40
133	Adaptive Lossless Entropy Compressors for Tiny IoT Devices. *IEEE Transactions on Wireless Communications*, **2014**, 13, 1088-1100	9.6	39
132	Feature selection based on a modified fuzzy C-means algorithm with supervision. *Information Sciences*, **2003**, 151, 201-226	7.7	38
131	Urban and social sensing for sustainable mobility in smart cities **2013**,		36
130	A two-objective evolutionary approach based on topological constraints for node localization in wireless sensor networks. *Applied Soft Computing Journal*, **2012**, 12, 1891-1901	7.5	36
129	Multi-objective evolutionary learning of granularity, membership function parameters and rules of Mamdani fuzzy systems. *Evolutionary Intelligence*, **2009**, 2, 21-37	1.7	36
128	Autonomic tracing of production processes with mobile and agent-based computing. *Information Sciences*, **2011**, 181, 935-953	7.7	35
127	Reducing Power Consumption in Wireless Sensor Networks Using a Novel Approach to Data Aggregation. *Computer Journal*, **2007**, 51, 227-239	1.3	33
126	On the influence of feature selection in fuzzy rule-based regression model generation. *Information Sciences*, **2016**, 329, 649-669	7.7	31
125	A Distributed Fuzzy Associative Classifier for Big Data. *IEEE Transactions on Cybernetics*, **2018**, 48, 2656-2669	11.2	30

124	A distributed approach to multi-objective evolutionary generation of fuzzy rule-based classifiers from big data. *Information Sciences*, **2017**, 415-416, 319-340	7.7	29
123	On reducing computational overhead in multi-objective genetic Takagi–Sugeno fuzzy systems. *Applied Soft Computing Journal*, **2011**, 11, 675-688	7.5	27
122	Genetic interval neural networks for granular data regression. *Information Sciences*, **2014**, 257, 313-330	7.7	26
121	An adaptive rule-based approach for managing situation-awareness. *Expert Systems With Applications*, **2012**, 39, 10796-10811	7.8	26
120	A new fuzzy relational clustering algorithm based on the fuzzy C-means algorithm. *Soft Computing*, **2005**, 9, 439-447	3.5	26
119	A novel associative classification model based on a fuzzy frequent pattern mining algorithm. *Expert Systems With Applications*, **2015**, 42, 2086-2097	7.8	25
118	A study on the application of instance selection techniques in genetic fuzzy rule-based classification systems: Accuracy-complexity trade-off. *Knowledge-Based Systems*, **2013**, 54, 32-41	7.3	22
117	An experimental study on evolutionary fuzzy classifiers designed for managing imbalanced datasets. *Neurocomputing*, **2014**, 146, 125-136	5.4	21
116	An intelligent system for electrical energy management in buildings **2011**,		20
115	Segmentation and reconstruction of the lung volume in CT images **2005**,		20
114	Learning concurrently data and rule bases of Mamdani fuzzy rule-based systems by exploiting a novel interpretability index. *Soft Computing*, **2011**, 15, 1981-1998	3.5	19
113	An efficient multi-objective evolutionary fuzzy system for regression problems. *International Journal of Approximate Reasoning*, **2013**, 54, 1434-1451	3.6	18
112	A multi-objective evolutionary approach to image quality/compression trade-off in JPEG baseline algorithm. *Applied Soft Computing Journal*, **2010**, 10, 548-561	7.5	18
111	Recognition of olfactory signals based on supervised fuzzy C-means and k-NN algorithms. *Pattern Recognition Letters*, **2001**, 22, 1007-1019	4.7	17
110	Context adaptation of mamdani fuzzy rule based systems. *International Journal of Intelligent Systems*, **2008**, 23, 397-418	8.4	15
109	A MapReduce-based fuzzy associative classifier for big data **2015**,		14
108	Situation-Aware Mobile Service Recommendation with Fuzzy Logic and Semantic Web **2009**,		14
107	Using multilayer perceptrons as receptive fields in the design of neural networks. *Neurocomputing*, **2009**, 72, 2536-2548	5.4	14

106	A New Multi-Objective Evolutionary Algorithm based on Convex Hull for Binary Classifier Optimization **2007**,		14
105	Leaving inconsistency using fuzzy logic. *Information and Software Technology*, **2001**, 43, 725-741	3.4	14
104	Comparing ensemble strategies for deep learning: An application to facial expression recognition. *Expert Systems With Applications*, **2019**, 136, 1-11	7.8	12
103	A fuzzy relational clustering algorithm based on a dissimilarity measure extracted from data. *IEEE Transactions on Systems, Man, and Cybernetics*, **2004**, 34, 775-82		12
102	Some considerations on input and output partitions to produce meaningful conclusions in fuzzy inference. *Fuzzy Sets and Systems*, **2000**, 113, 221-235	3.7	12
101	Reducing computation overhead in MISO fuzzy systems. *Fuzzy Sets and Systems*, **2000**, 113, 485-496	3.7	12
100	A fuzzy approach to 2D-shape recognition. *IEEE Transactions on Fuzzy Systems*, **2001**, 9, 5-16	8.3	12
99	Multi-objective Evolutionary Fuzzy Systems. *Lecture Notes in Computer Science*, **2011**, 83-90	0.9	12
98	Using context history to personalize a resource recommender via a genetic algorithm **2010**,		11
97	Combining Fuzzy Logic and Semantic Web to Enable Situation-Awareness in Service Recommendation. *Lecture Notes in Computer Science*, **2010**, 31-45	0.9	11
96	A novel approach to fuzzy clustering based on a dissimilarity relation extracted from data using a TS system. *Pattern Recognition*, **2006**, 39, 2077-2091	7.7	11
95	Optimizing Partition Granularity, Membership Function Parameters, and Rule Bases of Fuzzy Classifiers for Big Data by a Multi-objective Evolutionary Approach. *Cognitive Computation*, **2019**, 11, 367-387	4.4	11
94	Computer-aided detection of lung nodules based on decision fusion techniques. *Pattern Analysis and Applications*, **2011**, 14, 295-310	2.3	10
93	A WSN-based testbed for energy efficiency in buildings **2011**,		10
92	A Hierarchical Fuzzy Clustering-based System to Create User Profiles. *Soft Computing*, **2007**, 11, 157-168	3.5	10
91	A Fuzzy Approach to Data Aggregation to Reduce Power Consumption in Wireless Sensor Networks **2006**,		10
90	Cerere: an information system supporting traceability in the food supply chain **2005**,		10
89	Feature selection based on similarity. *Electronics Letters*, **2002**, 38, 121	1.1	10

88	An analysis of boosted ensembles of binary fuzzy decision trees. *Expert Systems With Applications*, **2020**, 154, 113436	7.8	9
87	A SITUATION-AWARE RESOURCE RECOMMENDER BASED ON FUZZY AND SEMANTIC WEB RULES. *International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems*, **2010**, 18, 411-430	0.8	9
86	A linguistic fuzzy recogniser of off-line handwritten characters. *Pattern Recognition Letters*, **2000**, 21, 319-327	4.7	9
85	An overview of recent distributed algorithms for learning fuzzy models in Big Data classification. *Journal of Big Data*, **2020**, 7,	11.7	9
84	Low-Effort Support to Efficient Urban Parking in a Smart City Perspective. *Advances in Intelligent Systems and Computing*, **2014**, 233-252	0.4	9
83	**2013**,		8
82	A novel approach for internet traffic classification based on multi-objective evolutionary fuzzy classifiers **2017**,		8
81	A new approach to fuzzy random forest generation **2015**,		8
80	Developing object-oriented framworks using domain models. *ACM Computing Surveys*, **2000**, 32, 11	13.4	8
79	A multi-agent system for enabling collaborative situation awareness via position-based stigmergy and neuro-fuzzy learning. *Neurocomputing*, **2014**, 135, 86-97	5.4	7
78	An efficient model-based methodology for developing device-independent mobile applications. *Journal of Systems Architecture*, **2012**, 58, 286-304	5.5	7
77	Complexity reduction of Mamdani Fuzzy Systems through multi-valued logic minimization. *Conference Proceedings IEEE International Conference on Systems, Man, and Cybernetics*, **2008**,	2	7
76	Combining supervised and unsupervised learning for data clustering. *Neural Computing and Applications*, **2006**, 15, 289-297	4.8	7
75	FROS: a fuzzy logic-based recogniser of olfactory signals. *Pattern Recognition*, **2001**, 34, 2215-2226	7.7	7
74	Enabling Traceability in the Wine Supply Chain. *Lecture Notes in Computer Science*, **2012**, 397-412	0.9	7
73	Multi-objective evolutionary generation of Mamdani fuzzy rule-based systems based on rule and condition selection **2011**,		6
72	Beatrix: A self-learning system for off-line recognition of handwritten texts. *Pattern Recognition Letters*, **1997**, 18, 583-594	4.7	6
71	A CAD System for Lung Nodule Detection based on an Anatomical Model and a Fuzzy Neural Network **2006**,		6

70	Approaching the Ocean Color problem using fuzzy rules. *IEEE Transactions on Systems, Man, and Cybernetics*, **2004**, 34, 1360-73		6
69	Deferring elimination of design alternatives in object-oriented methods. *Concurrency Computation Practice and Experience*, **2001**, 13, 1247-1279	1.4	6
68	A two-objective evolutionary approach to design lossy compression algorithms for tiny nodes of wireless sensor networks. *Evolutionary Intelligence*, **2010**, 3, 137-153	1.7	5
67	Fast Multiobjective Genetic Rule Learning Using an Efficient Method for Takagi-Sugeno Fuzzy Systems Identification **2008**,		5
66	Estimating the concentration of optically active constituents of sea water by Takagi–Sugeno models with quadratic rule consequents. *Pattern Recognition*, **2007**, 40, 2846-2860	7.7	5
65	Calibration of positron emission tomograph detector modules using new neural method. *Electronics Letters*, **2004**, 40, 360	1.1	5
64	Improving object-oriented methods by using fuzzy logic. *ACM SIGAPP Applied Computing Review: A Publication of the Special Interest Group on Applied Computing*, **2000**, 8, 14-23	0.7	5
63	Stance Analysis of Twitter Users: The Case of the Vaccination Topic in Italy. *IEEE Intelligent Systems*, **2020**, 1-1	4.2	5
62	Smart Profiling of City Areas Based on Web Data **2018**,		4
61	Monitoring negative opinion about vaccines from tweets analysis **2017**,		4
60	Multi-objective evolutionary rule and condition selection for designing fuzzy rule-based classifiers **2012**,		4
59	Towards Efficient Multi-objective Genetic Takagi-Sugeno Fuzzy Systems for High Dimensional Problems. *Adaptation, Learning, and Optimization*, **2010**, 397-422	0.7	4
58	A collaborative situation-aware scheme for mobile service recommendation **2011**,		4
57	A new approach to handle high dimensional and large datasets in multi-objective evolutionary fuzzy systems **2011**,		4
56	Exploiting a New Interpretability Index in the Multi-Objective Evolutionary Learning of Mamdani Fuzzy Rule-Based Systems **2009**,		4
55	Context Adaptation of Mamdani Fuzzy Systems through New Operators Tuned by a Genetic Algorithm **2006**,		4
54	Fuzzy logic-based object-oriented methods to reduce quantization error and contextual bias problems in software development. *Fuzzy Sets and Systems*, **2004**, 145, 57-80	3.7	4
53	A collaborative situation-aware scheme based on an emergent paradigm for mobile resource recommenders. *Journal of Ambient Intelligence and Humanized Computing*, **2013**, 4, 421-437	3.7	3

52	Reconfiguration of environmental data compression parameters through cognitive IoT technologies **2013**,		3
51	Feature Selection Based on Fuzzy Mutual Information. *Lecture Notes in Computer Science*, **2013**, 36-43	0.9	3
50	Exploiting a coevolutionary approach to concurrently select training instances and learn rule bases of Mamdani fuzzy systems **2010**,		3
49	Exploiting a three-objective evolutionary algorithm for generating Mamdani fuzzy rule-based systems **2010**,		3
48	An Effective Metaheuristic Approach to Node Localization in Wireless Sensor Networks **2011**,		3
47	A case study on the application of instance selection techniques for Genetic Fuzzy Rule-Based Classifiers **2012**,		3
46	Granular Data Regression with Neural Networks. *Lecture Notes in Computer Science*, **2011**, 172-179	0.9	3
45	Exploring the relations between supply chain performance and organizational culture: A fuzzy grey group decision model. *International Journal of Production Economics*, **2021**, 233, 108023	9.3	3
44	Identification of Takagi-Sugeno Fuzzy Systems Based on Multi-objective Genetic Algorithms. *Lecture Notes in Computer Science*, **2006**, 172-177	0.9	3
43	Evolutionary fuzzy classifiers for imbalanced datasets: An experimental comparison **2013**,		2
42	A Multi-objective Evolutionary Approach to Data Compression in Wireless Sensor Networks **2009**,		2
41	Solving the ocean color inverse problem by using evolutionary multi-objective optimization of neuro-fuzzy systems. *International Journal of Knowledge-Based and Intelligent Engineering Systems*, **2009**, 12, 339-355	0.5	2
40	Exploiting Fuzzy Ordering Relations to Preserve Interpretability in Context Adaptation of Fuzzy Systems. *IEEE International Conference on Fuzzy Systems*, **2007**,		2
39	Counteracting drift of olfactory sensors by appropriately selecting features. *Electronics Letters*, **2000**, 36, 509	1.1	2
38	NEW OPERATORS FOR CONTEXT ADAPTATION OF MAMDANI FUZZY SYSTEMS **2006**,		2
37	Multi-Objective Evolutionary Design of Fuzzy Rule-Based Systems **2016**, 635-670		2
36	Incremental Learning of Fuzzy Decision Trees for Streaming Data Classification		2
35	Incident Detection by Spatiotemporal Analysis of GPS Data **2016**,		2

34	Path Clustering Based on a Novel Dissimilarity Function for Ride-Sharing Recommenders **2016**,		2
33	Spreading fuzzy random forests with MapReduce **2016**,		2
32	A Fuzzy Density-based Clustering Algorithm for Streaming Data **2019**,		2
31	Building efficient fuzzy regression trees for large scale and high dimensional problems. *Journal of Big Data*, **2018**, 5,	11.7	2
30	Exploiting Multi-Objective Evolutionary Algorithms for Designing Energy-Efficient Solutions to Data Compression and Node Localization in Wireless Sensor Networks. *Studies in Computational Intelligence*, **2013**, 227-255	0.8	1
29	Multi-objective evolutionary granular rule-based classifiers: An experimental comparison **2017**,		1
28	Enabling Compression in Tiny Wireless Sensor Nodes **2011**,		1
27	S-NNLS: An efficient non-negative least squares algorithm for sequential data. *International Journal for Numerical Methods in Biomedical Engineering*, **2011**, 27, 770-773	2.6	1
26	Solving the node localization problem in WSNs by a two-objective evolutionary algorithm and local descent **2011**,		1
25	Morphogenetic approach to system identification. *International Journal of Intelligent Systems*, **2009**, 24, 955-975	8.4	1
24	A study on the application of different two-objective evolutionary algorithms to the node localization problem in wireless sensor networks **2011**,		1
23	Segmentation and reconstruction of the lung and the mediastinum volumes in CT images **2009**,		1
22	A Multi-Objective Genetic Approach to Concurrently Learn Partition Granularity and Rule Bases of Mamdani Fuzzy Systems **2008**,		1
21	Evolutionary Multi-Objective Optimization of Fuzzy Rule-Based Classifiers in the ROC Space. *IEEE International Conference on Fuzzy Systems*, **2007**,		1
20	Classification based on neural similarity. *Electronics Letters*, **2002**, 38, 810	1.1	1
19	Knowledge Base Learning of Linguistic Fuzzy Rule-Based Systems in a Multi-objective Evolutionary Framework. *Lecture Notes in Computer Science*, **2008**, 747-754	0.9	1
18	Integration of Web-Scraped Data in CPM Tools: The Case of Project Sibilla. *Advances in Intelligent Systems and Computing*, **2021**, 279-287	0.4	1
17	Exploiting Online Newspaper Articles Metadata for Profiling City Areas. *Lecture Notes in Computer Science*, **2019**, 203-215	0.9	1

16	TSF-DBSCAN: a Novel Fuzzy Density-based Approach for Clustering Unbounded Data Streams. *IEEE Transactions on Fuzzy Systems*, **2020**, 1-1	8.3	1
15	A Three-Objective Evolutionary Approach to Generate Mamdani Fuzzy Rule-Based Systems. *Lecture Notes in Computer Science*, **2009**, 613-620	0.9	1
14	FDBSCAN-APT: A Fuzzy Density-based Clustering Algorithm with Automatic Parameter Tuning **2020** ,		1
13	Exploiting Categorization of Online News for Profiling City Areas **2020**,		1
12	On the use of summarization and transformer architectures for profiling résumés. *Expert Systems With Applications*, **2021**, 184, 115521	7.8	1
11	Addressing Event-Driven Concept Drift in Twitter Stream: A Stance Detection Application. *IEEE Access*, **2021**, 9, 77758-77770	3.5	1
10	Modelling a Team of Radiologists for Lung Nodule Detection in CT Scans **2007**, 303-310		0
9	SK-MOEFS: A Library in Python for Designing Accurate and Explainable Fuzzy Models. *Communications in Computer and Information Science*, **2020**, 68-81	0.3	0
8	Assessing Accuracy of Ensemble Learning for Facial Expression Recognition with CNNs. *Lecture Notes in Computer Science*, **2019**, 406-417	0.9	
7	Special Issue on Advances in Intelligent Systems. *International Journal of Hybrid Intelligent Systems*, **2010**, 7, 237-237	0.9	
6	Fuzzy Clustering Based on Dissimilarity Relations Extracted from Data265-283		
5	An Artificial Olfactory System for Quality and Geographical Discrimination of Olive Oils. *Lecture Notes in Computer Science*, **2003**, 647-653	0.9	
4	Automating Software Development Process Using Fuzzy Logic. *Studies in Fuzziness and Soft Computing*, **2004**, 97-124	0.7	
3	A Data-Driven Approach to Automatic Extraction of Professional Figure Profiles from Résumés. *Lecture Notes in Computer Science*, **2019**, 155-165	0.9	
2	A System for Multi-Passenger Urban Ridesharing Recommendations with Ordered Multiple Stops. *Computer Journal*, **2020**, 63, 657-687	1.3	
1	Managing Students from 23 Different Countries in Distance Learning: The Foundation Course Experience of the University of Pisa. *Communications in Computer and Information Science*, **2022**, 129-140	0.3	