Diego H Milone

List of Publications by Year in descending order

104 papers	1,969 citations	279487 23 h-index	315357 38 g-index
109 all docs	109 docs citations	109 times ranked	2070 citing authors

#	Article	IF	Citations
1	Gender imbalance in medical imaging datasets produces biased classifiers for computer-aided diagnosis. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12592-12594.	3.3	270
2	Spoken emotion recognition using hierarchical classifiers. Computer Speech and Language, 2011, 25, 556-570.	2.9	109
3	Feature selection for face recognition based on multi-objective evolutionary wrappers. Expert Systems With Applications, 2013, 40, 5077-5084.	4.4	76
4	Simulation of photovoltaic centrals with dynamic shading. Applied Energy, 2013, 103, 278-289.	5.1	64
5	Automatic recognition of quarantine citrus diseases. Expert Systems With Applications, 2013, 40, 3512-3517.	4.4	57
6	Learning deformable registration of medical images with anatomical constraints. Neural Networks, 2020, 124, 269-279.	3.3	52
7	A real-time algorithm for acoustic monitoring of ingestive behavior of grazing cattle. Computers and Electronics in Agriculture, 2016, 127, 64-75.	3.7	50
8	Automatic recognition of ingestive sounds of cattle based on hidden Markov models. Computers and Electronics in Agriculture, 2012, 87, 51-55.	3.7	46
9	Acoustic monitoring of short-term ingestive behavior and intake in grazing sheep. Livestock Science, 2011, 140, 32-41.	0.6	43
10	Perceptual evaluation of blind source separation for robust speech recognition. Signal Processing, 2008, 88, 2578-2583.	2.1	40
11	miRNAfe: A comprehensive tool for feature extraction in microRNA prediction. BioSystems, 2015, 138, 1-5.	0.9	37
12	Metabolic analyses of interspecific tomato recombinant inbred lines for fruit quality improvement. Metabolomics, 2015, 11, 1416-1431.	1.4	35
13	Emotion recognition in never-seen languages using a novel ensemble method with emotion profiles. IEEE Transactions on Affective Computing, 2017, 8, 43-53.	5.7	35
14	Screening of obstructive sleep apnea with empirical mode decomposition of pulse oximetry. Medical Engineering and Physics, 2014, 36, 1074-1080.	0.8	34
15	Monitoring and assessment of ingestive chewing sounds for prediction of herbage intake rate in grazing cattle. Animal, 2018, 12, 973-982.	1.3	33
16	Computational method for segmentation and classification of ingestive sounds in sheep. Computers and Electronics in Agriculture, 2009, 65, 228-237.	3.7	31
17	Predicting novel microRNA: a comprehensive comparison of machine learning approaches. Briefings in Bioinformatics, 2019, 20, 1607-1620.	3.2	31
18	Assessment of Homomorphic Analysis for Human Activity Recognition From Acceleration Signals. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 1001-1010.	3.9	29

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19	High Class-Imbalance in pre-miRNA Prediction: A Novel Approach Based on deepSOM. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2017, 14, 1316-1326.	1.9	28
20	Deep Neural Architectures for Highly Imbalanced Data in Bioinformatics. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 2857-2867.	7.2	28
21	Genetic wavelet packets for speech recognition. Expert Systems With Applications, 2013, 40, 2350-2359.	4.4	26
22	An online method for estimating grazing and rumination bouts using acoustic signals in grazing cattle. Computers and Electronics in Agriculture, 2020, 173, 105443.	3.7	25
23	Deepred-Mt: Deep representation learning for predicting C-to-U RNA editing in plant mitochondria. Computers in Biology and Medicine, 2021, 136, 104682.	3.9	25
24	Extreme learning machines for reverse engineering of gene regulatory networks from expression time series. Bioinformatics, 2018, 34, 1253-1260.	1.8	24
25	Novel SARS-CoV-2 encoded small RNAs in the passage to humans. Bioinformatics, 2021, 36, 5571-5581.	1.8	24
26	*omeSOM: a software for clustering and visualization of transcriptional and metabolite data mined from interspecific crosses of crop plants. BMC Bioinformatics, 2010, 11, 438.	1.2	23
27	A regularity-based algorithm for identifying grazing and rumination bouts from acoustic signals in grazing cattle. Computers and Electronics in Agriculture, 2018, 151, 392-402.	3.7	22
28	An ICA-based method for the segmentation of pigmented skin lesions in macroscopic images. , 2011, 2011, 5993-6.		21
29	A new index for clustering validation with overlapped clusters. Expert Systems With Applications, 2016, 64, 549-556.	4.4	21
30	On the Adaptability of Unsupervised CNN-Based Deformable Image Registration to Unseen Image Domains. Lecture Notes in Computer Science, 2018, , 294-302.	1.0	21
31	Whole genome analysis of codon usage in Echinococcus. Molecular and Biochemical Parasitology, 2018, 225, 54-66.	0.5	21
32	Alternative usage of miRNA-biogenesis co-factors in plants at low temperatures. Development (Cambridge), 2019, 146, .	1.2	21
33	Evolutionary Splines for Cepstral Filterbank Optimization in Phoneme Classification. Eurasip Journal on Advances in Signal Processing, 2011, 2011, .	1.0	20
34	Objective quality evaluation in blind source separation for speech recognition in a real room. Signal Processing, 2007, 87, 1951-1965.	2.1	19
35	Evolutionary cepstral coefficients. Applied Soft Computing Journal, 2011, 11, 3419-3428.	4.1	19
36	Transfer Learning Based on Optimal Transport for Motor Imagery Brain-Computer Interfaces. IEEE Transactions on Biomedical Engineering, 2022, 69, 807-817.	2.5	18

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37	Denoising and recognition using hidden Markov models with observation distributions modeled by hidden Markov trees. Pattern Recognition, 2010, 43, 1577-1589.	5.1	17
38	Data Mining Over Biological Datasets: An Integrated Approach Based on Computational Intelligence. IEEE Computational Intelligence Magazine, 2012, 7, 22-34.	3.4	17
39	Wavelet shrinkage using adaptive structured sparsity constraints. Signal Processing, 2015, 106, 73-87.	2.1	17
40	Introducing complexity measures in nonlinear physiological signals: application to robust speech recognition. Physica A: Statistical Mechanics and Its Applications, 2004, 332, 496-508.	1.2	15
41	microRNA analysis of Taenia crassiceps cysticerci under praziquantel treatment and genome-wide identification of Taenia solium miRNAs. International Journal for Parasitology, 2017, 47, 643-653.	1.3	15
42	Prosodic and accentual information for automatic speech recognition. IEEE Transactions on Speech and Audio Processing, 2003, 11, 321-333.	2.0	14
43	A Biologically Inspired Validity Measure for Comparison of Clustering Methods over Metabolic Data Sets. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2012, 9, 706-716.	1.9	14
44	Diversity control for improving the analysis of consensus clustering. Information Sciences, 2016, 361-362, 120-134.	4.0	14
45	Efficiency study of different photovoltaic plant connection schemes under dynamic shading. International Journal of Hydrogen Energy, 2010, 35, 5838-5843.	3.8	13
46	A very simple and fast way to access and validate algorithms in reproducible research. Briefings in Bioinformatics, 2016, 17, 180-183.	3.2	13
47	Feature extraction based on bio-inspired model for robust emotion recognition. Soft Computing, 2017, 21, 5145-5158.	2.1	13
48	Genome-wide pre-miRNA discovery from few labeled examples. Bioinformatics, 2018, 34, 541-549.	1.8	13
49	Genome-wide discovery of pre-miRNAs: comparison of recent approaches based on machine learning. Briefings in Bioinformatics, 2021, 22, .	3.2	13
50	ChronoRoot: High-throughput phenotyping by deep segmentation networks reveals novel temporal parameters of plant root system architecture. GigaScience, 2021, 10, .	3.3	13
51	MicroRNA discovery in the human parasite Echinococcus multilocularis from genome-wide data. Genomics, 2016, 107, 274-280.	1.3	12
52	Feature optimisation for stress recognition in speech. Pattern Recognition Letters, 2016, 84, 1-7.	2.6	12
53	High precision in microRNA prediction: A novel genome-wide approach with convolutional deep residual networks. Computers in Biology and Medicine, 2021, 134, 104448.	3.9	12
54	Bioinspired sparse spectro-temporal representation of speech for robust classification. Computer Speech and Language, 2012, 26, 336-348.	2.9	11

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55	Mining Gene Regulatory Networks by Neural Modeling of Expression Time-Series. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2015, 12, 1365-1373.	1.9	11
56	Discriminative power of acoustic features for jaw movement classification in cattle and sheep. Bioacoustics, 2020, 29, 602-616.	0.7	11
57	Deep Learning for the discovery of new pre-miRNAs: Helping the fight against COVID-19. Machine Learning With Applications, 2021, 6, 100150.	3.0	11
58	Clustering biological data with SOMs: On topology preservation in non-linear dimensional reduction. Expert Systems With Applications, 2013, 40, 3841-3845.	4.4	10
59	miRe2e: a full end-to-end deep model based on transformers for prediction of pre-miRNAs. Bioinformatics, 2022, 38, 1191-1197.	1.8	10
60	Neural network model for integration and visualization of introgressed genome and metabolite data. , 2009, , .		9
61	Photovoltaic Inverters Optimisation. Energy Procedia, 2012, 14, 1484-1489.	1.8	9
62	Denoising sound signals in a bioinspired non-negative spectro-temporal domain. , 2015, 38, 22-31.		9
63	Multiâ€objective optimisation of wavelet features for phoneme recognition. IET Signal Processing, 2016, 10, 685-691.	0.9	9
64	Inferring Unknown Biological Function by Integration of GO Annotations and Gene Expression Data. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2018, 15, 168-180.	1.9	9
65	Complexity measures of the mature miRNA for improving pre-miRNAs prediction. Bioinformatics, 2020, 36, 2319-2327.	1.8	9
66	An evolutionary wrapper for feature selection in face recognition applications. , 2012, , .		8
67	Photovoltaic generation model as a function of weather variables using artificial intelligence techniques. International Journal of Hydrogen Energy, 2012, 37, 14781-14785.	3.8	8
68	Using multiple frequency bins for stabilization of FD-ICA algorithms. Signal Processing, 2016, 119, 162-168.	2.1	8
69	Dimensional Affect Recognition from HRV: An Approach Based on Supervised SOM and ELM. IEEE Transactions on Affective Computing, 2020, 11, 32-44.	5.7	8
70	Improving clustering with metabolic pathway data. BMC Bioinformatics, 2014, 15, 101.	1.2	7
71	Audio recordings dataset of grazing jaw movements in dairy cattle. Data in Brief, 2020, 30, 105623.	0.5	7
72	Indeterminacy Free Frequency-Domain Blind Separation of Reverberant Audio Sources. IEEE Transactions on Audio Speech and Language Processing, 2009, 17, 299-311.	3.8	6

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73	Genome-wide hairpins datasets of animals and plants for novel miRNA prediction. Data in Brief, 2019, 25, 104209.	0.5	6
74	An evolutionary approach for searching metabolic pathways. Computers in Biology and Medicine, 2013, 43, 1704-1712.	3.9	5
75	Auditory Cortical Representations of Speech Signals for Phoneme Classification. Lecture Notes in Computer Science, 2007, , 1004-1014.	1.0	4
76	Multiresolution information measures applied to speech recognition. Physica A: Statistical Mechanics and Its Applications, 2007, 385, 319-332.	1.2	4
77	Signal denoising with hidden Markov models using hidden Markov trees as observation densities. , 2008, , .		4
78	Compressing arrays of classifiers using Volterra-neural network: application to face recognition. Neural Computing and Applications, 2013, 23, 1687-1701.	3.2	4
79	EvoMS: An evolutionary tool to find de novo metabolic pathways. BioSystems, 2015, 134, 43-47.	0.9	4
80	DL4papers: a deep learning approach for the automatic interpretation of scientific articles. Bioinformatics, 2020, 36, 3499-3506.	1.8	4
81	An EM Algorithm to Learn Sequences in the Wavelet Domain. Lecture Notes in Computer Science, 2007, , 518-528.	1.0	4
82	Evolutionary algorithm for speech segmentation. , 0, , .		3
83	Correlated Postfiltering and Mutual Information in Pseudoanechoic Model Based Blind Source Separation. Journal of Signal Processing Systems, 2011, 63, 333-344.	1.4	3
84	Genetic wrapper approach for automatic diagnosis of speech disorders related to Autism. , 2013, , .		3
85	Metabolic pathways synthesis based on ant colony optimization. Scientific Reports, 2018, 8, 16398.	1.6	3
86	Clustermatch: discovering hidden relations in highly diverse kinds of qualitative and quantitative data without standardization. Bioinformatics, 2019, 35, 1931-1939.	1.8	3
87	Study of complexity in normal and pathological speech signals. , 0, , .		2
88	Minimum classification error learning for sequential data in the wavelet domain. Pattern Recognition, 2010, 43, 3998-4010.	5.1	2
89	Compressing a neural network classifier using a Volterra-Neural Network model. , 2010, , .		2
90	Evolutionary algorithm for metabolic pathways synthesis. BioSystems, 2016, 144, 55-67.	0.9	2

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91	Blankets Joint Posterior score for learning Markov network structures. International Journal of Approximate Reasoning, 2018, 92, 295-320.	1.9	2
92	Comparison of On-Line Wavelet Analysis and Reconstruction: With Application to ECG. , 2011, , .		1
93	Extreme learning machine prediction under high class imbalance in bioinformatics. , 2017, , .		1
94	Métodos de agrupamiento no supervisado para la integración de datos genómicos y metabólicos de múltiples líneas de introgresión. Inteligencia Artificial, 2009, 13, .	0.5	1
95	Learning Hidden Markov Models with Hidden Markov Trees as Observation Distributions. Inteligencia Artificial, 2008, 12, .	0.5	1
96	Bridging physiological and perceptual views of autism by means of sampling-based Bayesian inference. Network Neuroscience, 0, , 1-17.	1.4	1
97	Computational Prediction of Novel miRNAs from Genome-Wide Data. Methods in Molecular Biology, 2017, 1654, 29-37.	0.4	0
98	Array of Multilayer Perceptrons with No-class Resampling Training for Face Recognition. Inteligencia Artificial, 2009, 13, .	0.5	0
99	Minimum Classification Error Training of Hidden Markov Models for Sequential Data in the Wavelet Domain. Inteligencia Artificial, 2009, 13, .	0.5	0
100	Analysis and Integration of Biological Data. , 2013, , 203-230.		0
101	Solar Power Plant Optimization. Advances in Environmental Engineering and Green Technologies Book Series, 2015, , 274-299.	0.3	0
102	Solar Power Plant Optimization. , 2017, , 360-385.		0
103	Analysis and Integration of Biological Data. Advances in Data Mining and Database Management Book Series, 0, , 287-314.	0.4	0
104	On the relationship between research parasites and fairness in machine learning: challenges and opportunities. GigaScience, 2021, 10, .	3.3	0