Pedro Castillo Valdivieso

List of Publications by Year in Descending Order

119 papers	963 citations	15 h-index	26 g-index
133 ext. papers	1,154 ext. citations	2.1 avg, IF	4.18 L-index

#	Paper	IF	Citations
119	EvoCC: An Open-Source Classification-Based Nature-Inspired Optimization Clustering Framework in Python. *Lecture Notes in Computer Science*, **2022**, 77-92	0.9	0
118	Exploring the Role of Chatbots and Messaging Applications in Higher Education: A Teachers Perspective. *Lecture Notes in Computer Science*, **2022**, 205-223	0.9	
117	EvoCluster: An Open-Source Nature-Inspired Optimization Clustering Framework. *SN Computer Science*, **2021**, 2, 1	2	4
116	A Methodology for Redesigning Networks by Using Markov Random Fields. *Mathematics*, **2021**, 9, 1389	2.3	
115	Studying How to Apply Chatbots Technology in Higher-Education: First Results and Future Strategies. *Lecture Notes in Computer Science*, **2021**, 185-198	0.9	1
114	A Robust Multi-Objective Feature Selection Model Based on Local Neighborhood Multi-Verse Optimization. *IEEE Access*, **2021**, 9, 100009-100028	3.5	4
113	Comparing the Performance of Deep Learning Methods to Predict Companies Financial Failure. *IEEE Access*, **2021**, 9, 97010-97038	3.5	3
112	Teaching Learning-Based Optimization With Evolutionary Binarization Schemes for Tackling Feature Selection Problems. *IEEE Access*, **2021**, 9, 41082-41103	3.5	8
111	. *IEEE Access*, **2020**, 8, 54237-54253	3.5	2
110	Using Evolutionary Algorithms for Server Hardening via the Moving Target Defense Technique. *Lecture Notes in Computer Science*, **2020**, 670-685	0.9	0
109	EvoCluster: An Open-Source Nature-Inspired Optimization Clustering Framework in Python. *Lecture Notes in Computer Science*, **2020**, 20-36	0.9	14
108	. *IEEE Access*, **2020**, 8, 189930-189944	3.5	7
107	Cost-sensitive ensemble methods for bankruptcy prediction in a highly imbalanced data distribution: a real case from the Spanish market. *Progress in Artificial Intelligence*, **2020**, 9, 361-375	4	9
106	Improving financial bankruptcy prediction in a highly imbalanced class distribution using oversampling and ensemble learning: a case from the Spanish market. *Progress in Artificial Intelligence*, **2020**, 9, 31-53	4	28
105	Improving the algorithmic efficiency and performance of channel-based evolutionary algorithms **2019**,		1
104	Distributed multi-objective evolutionary optimization using island-based selective operator application. *Applied Soft Computing Journal*, **2019**, 85, 105757	7.5	5
103	Exploring Concurrent and Stateless Evolutionary Algorithms. *Lecture Notes in Computer Science*, **2019**, 405-412	0.9	2

102	Scaling in Concurrent Evolutionary Algorithms. *Communications in Computer and Information Science*, **2019**, 16-27	0.3	1
101	A bibliometric study of the research area of videogames using Dimensions.ai database. *Procedia Computer Science*, **2019**, 162, 737-744	1.6	4
100	Applying Ant Colony optimization for Service Function Chaining in a 5G Network **2019**,		2
99	From ephemeral computing to deep bioinspired algorithms: New trends and applications. *Future Generation Computer Systems*, **2018**, 88, 735-746	7.5	10
98	Altmétricas a nivel institucional: visibilidad en la Web de la producción científica de las universidades españolas a partir de Altmetric.com. *Profesional De La Informacion*, **2018**, 27, 483	3.7	3
97	Studying real traffic and mobility scenarios for a Smart City using a new monitoring and tracking system. *Future Generation Computer Systems*, **2017**, 76, 163-179	7.5	38
96	Ranking Programming Languages for Evolutionary Algorithm Operations. *Lecture Notes in Computer Science*, **2017**, 689-704	0.9	0
95	Applying computational intelligence methods for predicting the sales of newly published books in a real editorial business management environment. *Knowledge-Based Systems*, **2017**, 115, 133-151	7.3	22
94	Analysing the influence of the fitness function on genetically programmed bots for a real-time strategy game. *Entertainment Computing*, **2017**, 18, 15-29	1.9	5
93	Finding Self-organized Criticality in Collaborative Work via Repository Mining. *Lecture Notes in Computer Science*, **2017**, 483-496	0.9	
92	Impact of Protests in the Number of Smart Devices in Streets: A New Approach to Analyze Protesters Behavior. *Lecture Notes in Computer Science*, **2017**, 75-85	0.9	
91	Application Areas of Ephemeral Computing: A Survey. *Lecture Notes in Computer Science*, **2016**, 153-167	0.9	1
90	Performance for the Masses **2016**,		2
89	Comparing Wireless Traffic Tracking with Regular Traffic Control Systems for the Detection of Congestions in Streets. *Lecture Notes in Computer Science*, **2016**, 42-51	0.9	2
88	Benchmarking Languages for Evolutionary Algorithms. *Lecture Notes in Computer Science*, **2016**, 27-41	0.9	3
87	Studying the effect of population size in distributed evolutionary algorithms on heterogeneous clusters. *Applied Soft Computing Journal*, **2016**, 38, 530-547	7.5	5
86	EvoloPy: An Open-source Nature-inspired Optimization Framework in Python **2016**,		39
85	Addressing High Dimensional Multi-objective Optimization Problems by Coevolutionary Islands with Overlapping Search Spaces. *Lecture Notes in Computer Science*, **2016**, 107-117	0.9	2

84	Simulation Approach for Optimal Maintenance Intervals Estimation of Electronic Devices. *Advances in Intelligent Systems and Computing*, **2016**, 153-164	0.4	3
83	A Novel Wireless Mobility Monitoring and Tracking System. *International Journal of Conceptual Structures and Smart Applications*, **2016**, 4, 55-71		3
82	A comparison of implementations of basic evolutionary algorithm operations in different languages **2016**,		1
81	There Can Be only One: Evolving RTS Bots via Joust Selection. *Lecture Notes in Computer Science*, **2016**, 541-557	0.9	3
80	Comparing Heterogeneous and Homogeneous Flocking Strategies for the Ghost Team in the Game of Ms. Pac-Man. *IEEE Transactions on Games*, **2016**, 8, 278-287		1
79	A Cross-Platform Assessment of Energy Consumption in Evolutionary Algorithms. *Lecture Notes in Computer Science*, **2016**, 548-557	0.9	8
78	The Uncertainty Quandary: A Study in the Context of the Evolutionary Optimization in Games and Other Uncertain Environments. *Lecture Notes in Computer Science*, **2016**, 40-60	0.9	1
77	NodIO **2016**,		6
76	Corporate security solutions for BYOD: A novel user-centric and self-adaptive system. *Computer Communications*, **2015**, 68, 83-95	5.1	14
75	Ephemeral Computing and Bioinspired Optimization - Challenges and Opportunities **2015**,		13
74	How the World Was MADE: Parametrization of Evolved Agent-Based Models for Backstory Generation. *Lecture Notes in Computer Science*, **2015**, 443-454	0.9	2
73	Comparing Optimization Methods, in Continuous Space, for Modelling with a Diffusion Process. *Lecture Notes in Computer Science*, **2015**, 380-390	0.9	1
72	It Time to Stop: A Comparison of Termination Conditions in the Evolution of Game Bots. *Lecture Notes in Computer Science*, **2015**, 355-368	0.9	1
71	A Methodology to Develop Service Oriented Evolutionary Algorithms. *Studies in Computational Intelligence*, **2015**, 119-125	0.8	
70	Creating autonomous agents for playing Super Mario Bros game by means of evolutionary finite state machines. *Evolutionary Intelligence*, **2014**, 6, 205-218	1.7	6
69	Studying and Tackling Noisy Fitness in Evolutionary Design of Game Characters **2014**,		5
68	Co-Evolutionary Optimization of Autonomous Agents in a Real-Time Strategy Game. *Lecture Notes in Computer Science*, **2014**, 374-385	0.9	3
67	Tree Depth Influence in Genetic Programming for Generation of Competitive Agents for RTS Games. *Lecture Notes in Computer Science*, **2014**, 411-421	0.9	5

66	Evolving Evil: Optimizing Flocking Strategies Through Genetic Algorithms for the Ghost Team in the Game of Ms. Pac-Man. *Lecture Notes in Computer Science*, **2014**, 313-324	0.9	4
65	Cloud-based evolutionary algorithms: An algorithmic study. *Natural Computing*, **2013**, 12, 135-147	1.3	10
64	Pareto-based multi-colony multi-objective ant colony optimization algorithms: an island model proposal. *Soft Computing*, **2013**, 17, 1175-1207	3.5	23
63	Service oriented evolutionary algorithms. *Soft Computing*, **2013**, 17, 1059-1075	3.5	17
62	hCHAC: A family of MOACO algorithms for the resolution of the bi-criteria military unit pathfinding problem. *Computers and Operations Research*, **2013**, 40, 1524-1551	4.6	9
61	**2013**,		1
60	Using statistical tools to determine the significance and relative importance of the main parameters of an evolutionary algorithm. *Intelligent Data Analysis*, **2013**, 17, 771-789	1.1	2
59	Designing and Evolving an Unreal TournamentTM 2004 Expert Bot. *Lecture Notes in Computer Science*, **2013**, 312-323	0.9	
58	Determining the significance and relative importance of parameters of a simulated quenching algorithm using statistical tools. *Applied Intelligence*, **2012**, 37, 239-254	4.9	7
57	Using Student Conferences to Increase Participation in the Classroom: A Case Study. *IEEE Transactions on Education*, **2012**, 55, 580-581	2.1	2
56	GPU Computation in Bioinspired Algorithms: A Review. *Lecture Notes in Computer Science*, **2011**, 433-440	0.9	4
55	**2011**,		5
54	Using free cloud storage services for distributed evolutionary algorithms **2011**,		3
53	A Study of Parallel Approaches in MOACOs for Solving the Bicriteria TSP. *Lecture Notes in Computer Science*, **2011**, 316-324	0.9	3
52	Implementation Matters: Programming Best Practices for Evolutionary Algorithms. *Lecture Notes in Computer Science*, **2011**, 333-340	0.9	14
51	Online vs. Offline ANOVA Use on Evolutionary Algorithms. *Lecture Notes in Computer Science*, **2011**, 341-347	0.9	1
50	Evolution of XPath Lists for Document Data Selection **2010**, 341-350		
49	Algorithm::Evolutionary, a flexible Perl module for evolutionary computation. *Soft Computing*, **2010**, 14, 1091-1109	3.5	17

48	Evolvable Agents: A Framework for Peer-to-Peer Evolutionary Algorithms. *Studies in Computational Intelligence*, **2010**, 43-62	0.8	2
47	A Distributed Service Oriented Framework for Metaheuristics Using a Public Standard. *Studies in Computational Intelligence*, **2010**, 211-222	0.8	7
46	Studying the Influence of the Objective Balancing Parameter in the Performance of a Multi-Objective Ant Colony Optimization Algorithm. *Studies in Computational Intelligence*, **2010**, 163-176	0.8	
45	Parallelizing the Design of Radial Basis Function Neural Networks by Means of Evolutionary Meta-algorithms. *Lecture Notes in Computer Science*, **2009**, 383-390	0.9	2
44	Studying the Cache Size in a Gossip-Based Evolutionary Algorithm. *Studies in Computational Intelligence*, **2009**, 131-140	0.8	1
43	Pervasive Evolutionary Algorithms on Mobile Devices. *Lecture Notes in Computer Science*, **2009**, 163-170	0.9	
42	Using UN/CEFACTS Modelling Methodology (UMM) in e-Health Projects. *Lecture Notes in Computer Science*, **2009**, 925-932	0.9	
41	Asynchronous distributed genetic algorithms with Javascript and JSON **2008**,		16
40	Exploring population structures for locally concurrent and massively parallel Evolutionary Algorithms **2008**,		7
39	**2008**,		2
38	Comparing multiobjective evolutionary ensembles for minimizing type I and II errors for bankruptcy prediction **2008**,		11
37	Evolvable agents, a fine grained approach for distributed evolutionary computing: walking towards the peer-to-peer computing frontiers. *Soft Computing*, **2008**, 12, 1145-1156	3.5	9
36	NectaRSS, an intelligent RSS feed reader. *Journal of Network and Computer Applications*, **2008**, 31, 793-806	0.9	11
35	hCHAC-4, an ACO Algorithm for Solving the Four-Criteria Military Path-finding Problem. *Studies in Computational Intelligence*, **2008**, 73-84	0.8	1
34	Architecture Performance Prediction Using Evolutionary Artificial Neural Networks. *Lecture Notes in Computer Science*, **2008**, 175-183	0.9	3
33	P2P Evolutionary Algorithms: A Suitable Approach for Tackling Large Instances in Hard Optimization Problems. *Lecture Notes in Computer Science*, **2008**, 622-631	0.9	11
32	Evolving XSLT Stylesheets for Document Transformation. *Lecture Notes in Computer Science*, **2008**, 1021-1030	0.9	4
31	Testing the Intermediate Disturbance Hypothesis: Effect of Asynchronous Population Incorporation on Multi-Deme Evolutionary Algorithms. *Lecture Notes in Computer Science*, **2008**, 266-275	0.9	8

30	Evolvable Agents in Static and Dynamic Optimization Problems. *Lecture Notes in Computer Science*, **2008**, 488-497	0.9	2
29	Comparing evolutionary hybrid systems for design and optimization of multilayer perceptron structure along training parameters. *Information Sciences*, **2007**, 177, 2884-2905	7.7	21
28	Comparing ACO Algorithms for Solving the Bi-criteria Military Path-Finding Problem **2007**, 665-674		2
27	Empirical Validation of a Gossiping Communication Mechanism for Parallel EAs **2007**, 129-136		5
26	Enhancing a MOACO for Solving the Bi-criteria Pathfinding Problem for a Military Unit in a Realistic Battlefield **2007**, 712-721		5
25	Predicting Financial Distress: A Case Study Using Self-organizing Maps **2007**, 774-781		4
24	Multiobjective Optimization of Ensembles of Multilayer Perceptrons for Pattern Classification. *Lecture Notes in Computer Science*, **2006**, 453-462	0.9	4
23	Finding a needle in a haystack using hints and evolutionary computation: the case of evolutionary MasterMind. *Applied Soft Computing Journal*, **2006**, 6, 170-179	7.5	15
22	Designing a Control System for an Autonomous Robot Using an Evolutionary Algorithm. *Lecture Notes in Computer Science*, **2005**, 685-692	0.9	
21	Evolutionary Design of a Brain-Computer Interface. *Lecture Notes in Computer Science*, **2005**, 669-676	0.9	0
20	Co-evolving Multilayer Perceptrons Along Training Sets **2005**, 503-513		
19	Evolving RBF neural networks for time-series forecasting with EvRBF. *Information Sciences*, **2004**, 165, 207-220	7.7	72
18	Comparing Hybrid Systems to Design and Optimize Artificial Neural Networks. *Lecture Notes in Computer Science*, **2004**, 240-249	0.9	
17	Conference Paper Assignment Using a Combined Greedy/Evolutionary Algorithm. *Lecture Notes in Computer Science*, **2004**, 602-611	0.9	13
16	Evolving two-dimensional fuzzy systems. *Fuzzy Sets and Systems*, **2003**, 138, 381-398	3.7	6
15	Cooperative Co-evolution of Multilayer Perceptrons. *Lecture Notes in Computer Science*, **2003**, 358-365	0.9	2
14	Visualization of Neural Net Evolution. *Lecture Notes in Computer Science*, **2003**, 534-541	0.9	2
13	Application of HLVQ and G-Prop Neural Networks to the Problem of Bankruptcy Prediction. *Lecture Notes in Computer Science*, **2003**, 655-662	0.9	5

12	Statistical analysis of the parameters of a neuro-genetic algorithm. *IEEE Transactions on Neural Networks*, **2002**, 13, 1374-94		39
11	. *IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews*, **2002**, 32, 31-37		71
10	G-Prop: Global optimization of multilayer perceptrons using GAs. *Neurocomputing*, **2000**, 35, 149-163	5.4	102
9	Evolving Multilayer Perceptrons. *Neural Processing Letters*, **2000**, 12, 115-128	2.4	46
8	Optimizing web newspaper layout using simulated annealing. *Lecture Notes in Computer Science*, **1999**, 759-768	0.9	4
7	SA-prop: Optimization of multilayer perceptron parameters using simulated annealing. *Lecture Notes in Computer Science*, **1999**, 661-670	0.9	7
6	Improved automatic classification of biological particles from electron-microscopy images using genetic neural nets. *Lecture Notes in Computer Science*, **1999**, 373-382	0.9	1
5	Improving Evolution of XSLT Stylesheets Using Heuristic Operators. *Advances in Soft Computing*,161-170		
4	Evolving Machine Microprograms: Application to the CODE2 Microarchitecture. *Advances in Soft Computing*,461-470		
3	Open Access and Altmetrics in the pandemic age: Forescast analysis on COVID-19 literature		9
2	Classification of Arabic healthcare questions based on word embeddings learned from massive consultations: a deep learning approach. *Journal of Ambient Intelligence and Humanized Computing*,1	3.7	1
1	Population size influence on the energy consumption of genetic programming. *Measurement and Control*,002029402110644	1.5	