Roberto Battiti

List of Publications by Year
in descending order

72 papers	6,468 citations	236912 25 h-index	123420 61 g-index
75 all docs	75 docs citations	75 times ranked	5015 citing authors

#	Article	IF	Citations
1	Using mutual information for selecting features in supervised neural net learning. IEEE Transactions on Neural Networks, 1994, 5, 537-550.	4.2	1,968
2	First- and Second-Order Methods for Learning: Between Steepest Descent and Newton's Method. Neural Computation, 1992, 4, 141-166.	2.2	981
3	The Reactive Tabu Search. ORSA Journal on Computing, 1994, 6, 126-140.	1.7	654
4	Statistical learning theory for location fingerprinting in wireless LANs. Computer Networks, 2005, 47, 825-845.	5.1	443
5	MOEA/D-ACO: A Multiobjective Evolutionary Algorithm Using Decomposition and AntColony. IEEE Transactions on Cybernetics, 2013, 43, 1845-1859.	9.5	288
6	Democracy in neural nets: Voting schemes for classification. Neural Networks, 1994, 7, 691-707.	5.9	276
7	Hybridization of Decomposition and Local Search for Multiobjective Optimization. IEEE Transactions on Cybernetics, 2014, 44, 1808-1820.	9.5	239
8	Reactive Local Search for the Maximum Clique Problem1. Algorithmica, 2001, 29, 610-637.	1.3	179
9	Brainâ€“Computer Evolutionary Multiobjective Optimization: A Genetic Algorithm Adapting to the Decision Maker. IEEE Transactions on Evolutionary Computation, 2010, 14, 671-687.	10.0	118
10	Training neural nets with the reactive tabu search. IEEE Transactions on Neural Networks, 1995, 6, 1185-1200.	4.2	87
11	Parallel biased search for combinatorial optimization: genetic algorithms and TABU. Microprocessors and Microsystems, 1992, 16, 351-367.	2.8	85
12	Computing optical flow across multiple scales: An adaptive coarse-to-fine strategy. International Journal of Computer Vision, 1991, 6, 133-145.	15.6	81
13	Greedy, prohibition, and reactive heuristics for graph partitioning. IEEE Transactions on Computers, 1999, 48, 361-385.	3.4	76
14	Reactive Search and Intelligent Optimization. Operations Research/ Computer Science Interfaces Series, 2009, , .	0.3	74
15	The continuous reactive tabu search: Blending combinatorial optimization and stochastic search for global optimization. Annals of Operations Research, 1996, 63, 151-188.	4.1	71
16	Reactive search, a history-sensitive heuristic for MAX-SAT. Journal of Experimental Algorithmics, 1997, 2, 2.	1.0	66
17	Assigning codes in wireless networks: bounds and scaling properties. Wireless Networks, 1999, 5, 195-209.	3.0	63
18	The gregarious particle swarm optimizer (G-PSO). , 2006, , .		63

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19	A randomized saturation degree heuristic for channel assignment in cellular radio networks. IEEE Transactions on Vehicular Technology, 2001, 50, 364-374.	6.3	51
20	Performance Analysis of an Enhanced IEEE 802.11 Distributed Coordination Function Supporting Service Differentiation. Lecture Notes in Computer Science, 2003, , 152-161.	1.3	43
21	Learning with first, second, and no derivatives: A case study in high energy physics. Neurocomputing, 1994, 6, 181-206.	5.9	36
22	Local search with memory: benchmarking RTS. OR Spectrum, 1995, 17, 67-86.	3.4	33
23	Approximate Algorithms and Heuristics for MAX-SAT. , 1998, , 77-148.		32
24	Active Learning of Pareto Fronts. IEEE Transactions on Neural Networks and Learning Systems, 2014, 25, 506-519.	11.3	31
25	Wireless LANs: From WarChalking to Open Access Networks. Mobile Networks and Applications, 2005, 10, 275-287.	3.3	30
26	Feature Selection Based on the Neighborhood Entropy. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 6313-6322.	11.3	29
27	Reactive Search Optimization: Learning While Optimizing. Profiles in Operations Research, 2010, , 543-571.	0.4	26
28	Performance analysis of a service-dependent handoff scheme in voice/data integrated cellular mobile systems. Computer Networks, 2006, 50, 707-730.	5.1	21
29	Achieving Optimal Performance by Using the IEEE 802.11 MAC Protocol With Service Differentiation Enhancements. IEEE Transactions on Vehicular Technology, 2007, 56, 1374-1387.	6.3	20
30	A Multistart Randomized Greedy Algorithm for Traffic Grooming on Mesh Logical Topologies. IFIP Advances in Information and Communication Technology, 2003, , 417-430.	0.7	20
31	Supporting service differentiation with enhancements of the IEEE 802.11 MAC protocol: Models and analysis. Science in China Series F: Information Sciences, 2007, 50, 732-746.	1.1	18
32	R-EVO: A Reactive Evolutionary Algorithm for the Maximum Clique Problem. IEEE Transactions on Evolutionary Computation, 2011, 15, 770-782.	10.0	17
33	Cellular Channel Assignment: A New Localized and Distributed Strategy. Mobile Networks and Applications, 2001, 6, 493-500.	3.3	16
34	Analysis of the IEEE 802.11 DCF with Service Differentiation Support in Non-saturation Conditions. Lecture Notes in Computer Science, 2004, , 64-73.	1.3	15
35	Achieving optimal performance in IEEE 802.11 wireless LANs with the combination of link adaptation and adaptive backoff. Computer Networks, 2007, 51, 1574-1600.	5.1	12
36	Reactive and dynamic local search for max-clique: Engineering effective building blocks. Computers and Operations Research, 2010, 37, 534-542.	4.0	12

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37	Salary Prediction in the IT Job Market with Few High-Dimensional Samples: A Spanish Case Study. International Journal of Computational Intelligence Systems, 2018, 11, 1192.	2.7	10
38	An efficient weak secrecy scheme for network coding data dissemination in VANET. , 2008, , .		8
39	A reactive self-tuning scheme for multilevel graph partitioning. Applied Mathematics and Computation, 2018, 318, 227-244.	2.2	8
40	Dynamic Self-management of Autonomic Systems: The Reputation, Quality and Credibility (RQC) Scheme. Lecture Notes in Computer Science, 2005, , 165-178.	1.3	7
41	Learning and intelligent optimization (LION). Proceedings of the VLDB Endowment, 2013, 6, 1176-1177.	3.8	7
42	X-MIFS: Exact Mutual Information for feature selection. , 2016, , .		6
43	Achieving Maximum Throughput and Service Differentiation by Enhancing the IEEE 802.11 MAC Protocol. Lecture Notes in Computer Science, 2004, , 285-300.	1.3	6
44	Reactive Search Optimization: Learning While Optimizing. Profiles in Operations Research, 2019, , 479-511.	0.4	5
45	Combining intelligent heuristics with simulators in hotel revenue management. Annals of Mathematics and Artificial Intelligence, 2020, 88, 71-90.	1.3	5
46	RASH: A Self-adaptive Random Search Method. Studies in Computational Intelligence, 2008, , 95-117.	0.9	5
47	Grapheur: A Software Architecture for Reactive and Interactive Optimization. Lecture Notes in Computer Science, 2010, , 232-246.	1.3	5
48	Load Balancing in WDM Networks through Adaptive Routing Table Changes. Lecture Notes in Computer Science, 2002, , 289-300.	1.3	5
49	Reactive local search techniques for the maximum k-conjunctive constraint satisfaction problem (MAX-k-CCSP). Discrete Applied Mathematics, 1999, 96-97, 3-27.	0.9	4
50	A Cluster-Oriented Genetic Algorithm for Alternative Clustering. , 2012, , .		4
51	Discovering Non-redundant Overlapping Biclusters on Gene Expression Data. , 2013, , .		4
52	RoomTetris in room committing: why the role of minimum-length-of-stay requirements should be revisited. International Journal of Contemporary Hospitality Management, 2021, ahead-of-print, .	8.0	4
53	Learning While Optimizing an Unknown Fitness Surface. Lecture Notes in Computer Science, 2008, , 25-40.	1.3	4
54	An Investigation of Reinforcement Learning for Reactive Search Optimization. , 2011, , 131-160.		4

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55	<italic>CoRSO</italic> (Collaborative Reactive Search Optimization): Blending Combinatorial and Continuous Local Search. Informatica, 2016, 27, 299-322.	2.7	4
56	Stochastic Local Search for direct training of threshold networks. , 2015, , .		3
57	A flexible cluster-oriented alternative clustering algorithm for choosing from the Pareto front of solutions. Machine Learning, 2015, 98, 57-91.	5.4	3
58	GENOPT 2016: Design of a generalization-based challenge in global optimization. AIP Conference Proceedings, 2016, , .	0.4	3
59	RoomTetris: an optimal procedure for committing rooms to reservations in hotels. Journal of Hospitality and Tourism Technology, 2020, 11, 589-602.	3.8	3
60	Reactive Search. Chapman & Hall/CRC Computer and Information Science Series, 2007, , 21-1-21-17.	0.4	3
61	Real-time multi-scale vision on multi-computers. Concurrency and Computation: Practice and Experience, 1991, 3, 55-87.	0.5	2
62	On partitioning of hypergraphs. Discrete Mathematics, 2007, 307, 1737-1753.	0.7	2
63	Active Learning of Combinatorial Features for Interactive Optimization. Lecture Notes in Computer Science, 2011, , 336-350.	1.3	2
64	An On/Off Lattice Approach to Protein Structure Prediction from Contact Maps. Lecture Notes in Computer Science, 2010, , 368-379.	1.3	2
65	A Repeated Local Search Algorithm for BiClustering of Gene Expression Data. Lecture Notes in Computer Science, 2013, , 281-296.	1.3	2
66	Weak data secrecy via obfuscation in network coding based content distribution. , 2008, , .		1
67	Special issue on learning and intelligent optimization. Annals of Mathematics and Artificial Intelligence, 2010, 60, 1-2.	1.3	1
68	A Telescopic Binary Learning Machine for Training Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 665-677.	11.3	1
69	Internet Wireless Access: 802.11 and Beyond. Mobile Networks and Applications, 2006, 11, 213-214.	3.3	0
70	Guest editorial: Special issue based on the LION 4 conference. Annals of Mathematics and Artificial Intelligence, 2011, 61, 47-48.	1.3	0
71	Reactive Business Intelligence: Combining the Power of Optimization with Machine Learning. , 2013, , 2815-2848.		0
72	Extreme Reactive Portfolio (XRP): Tuning an Algorithm Population for Global Optimization. Lecture Notes in Computer Science, 2016, , 60-74.	1.3	0