Thomas Helmuth

List of Publications by Year
in descending order

30 papers	728 citations	1307594 7 h-index	1372567 10 g-index
30 all docs	30 docs citations	30 times ranked	123 citing authors

#	Article	IF	Citations
1	Problem-Solving Benefits of Down-Sampled Lexicase Selection. Artificial Life, 2022, 27, 183-203.	1.3	11
2	Applying genetic programming to PSB2: the next generation program synthesis benchmark suite. Genetic Programming and Evolvable Machines, 2022, 23, 375-404.	2.2	7
3	PSB2. , 2021, , .		24
4	Lexicase Selection. , 2021, , .		0
5	On the importance of specialists for lexicase selection. Genetic Programming and Evolvable Machines, 2020, 21, 349-373.	2.2	15
6	Genetic Source Sensitivity and Transfer Learning in Genetic Programming. , 2020, , .		11
7	Explaining and Exploiting the Advantages of Down-sampled Lexicase Selection. , 2020, , .		15
8	Benchmarking parent selection for program synthesis by genetic programming. , 2020, , .		15
9	A Probabilistic and Multi-Objective Analysis of Lexicase Selection and Îµ-Lexicase Selection. Evolutionary Computation, 2019, 27, 377-402.	3.0	43
10	Lexicase selection of specialists. , 2019, , .		16
11	Comparing and combining lexicase selection and novelty search. , 2019, , .		9
12	Program synthesis using uniform mutation by addition and deletion. , 2018, , .		42
13	A comparison of semantic-based initialization methods for genetic programming. , 2018, , .		3
14	Specialization and elitism in lexicase and tournament selection. , 2018, , .		5
15	Relaxations of Lexicase Parent Selection. Genetic and Evolutionary Computation, 2018, , 105-120.	1.0	20
16	Lexicase Selection with Weighted Shuffle. Genetic and Evolutionary Computation, 2018, , 89-104.	1.0	4
17	On the difficulty of benchmarking inductive program synthesis methods. , 2017, , .		13
18	Improving generalization of evolved programs through automatic simplification. , 2017, , .		45

#	Article	IF	Citations
19	The Impact of Hyperselection on Lexicase Selection. , 2016, , .		23
20	Visualizing Genetic Programming Ancestries. , 2016, , .		13
21	Effects of Lexicase and Tournament Selection on Diversity Recovery and Maintenance. , 2016, , .		23
22	Using Graph Databases to Explore the Dynamics of Genetic Programming Runs. Genetic and Evolutionary Computation, 2016, , 185-201.	1.0	8
23	Lexicase Selection for Program Synthesis: A Diversity Analysis. Genetic and Evolutionary Computation, 2016, , 151-167.	1.0	33
24	Solving Uncompromising Problems With Lexicase Selection. IEEE Transactions on Evolutionary Computation, 2015, 19, 630-643.	10.0	119
25	General Program Synthesis Benchmark Suite. , 2015, , .		121
26	Comparison of Semantic-aware Selection Methods in Genetic Programming. , 2015, , .		27
27	Word count as a traditional programming benchmark problem for genetic programming. , 2014, , .		11
28	Uniform Linear Transformation with Repair and Alternation in Genetic Programming. Genetic and Evolutionary Computation, 2014, , 137-153.	1.0	7
29	Evolving a digital multiplier with the pushgp genetic programming system. , 2013, , .		12
30	Tag-based modules in genetic programming. , 2011, , .		33