Michael W Mahoney

List of Publications by Year
in descending order

20 papers	2,008 citations	1040056 9 h-index	1125743 13 g-index
20 all docs	20 docs citations	20 times ranked	1740 citing authors

#	Article	IF	Citations
1	Newton-MR: Inexact Newton Method with minimum residual sub-problem solver. EURO Journal on Computational Optimization, 2022, 10, 100035.	2.4	1
2	Inexact Nonconvex Newton-Type Methods. INFORMS Journal on Optimization, 2021, 3, 154-182.	1.4	4
3	Predicting trends in the quality of state-of-the-art neural networks without access to training or testing data. Nature Communications, 2021, 12, 4122.	12.8	23
4	Improved Guarantees and a Multiple-descent Curve for Column Subset Selection and the Nystrom Method (Extended Abstract). , 2021, , .		4
5	Newton-type methods for non-convex optimization under inexact Hessian information. Mathematical Programming, 2020, 184, 35-70.	2.4	43
6	Second-order Optimization for Non-convex Machine Learning: an Empirical Study. , 2020, , 199-207.		35
7	Heavy-Tailed Universality Predicts Trends in Test Accuracies for Very Large Pre-Trained Deep Neural Networks. , 2020, , 505-513.		11
8	JumpReLU: A Retrofit Defense Strategy for Adversarial Attacks. , 2020, , .		3
9	Newton-ADMM: A Distributed GPU-Accelerated Optimizer for Multiclass Classification Problems. , 2020, , .		2
10	Group Collaborative Representation for Image Set Classification. International Journal of Computer Vision, 2019, 127, 181-206.	15.6	25
11	Statistical Mechanics Methods for Discovering Knowledge from Modern Production Quality Neural Networks. , 2019, , .		1
12	Sub-sampled Newton methods. Mathematical Programming, 2019, 174, 293-326.	2.4	56
13	Variational perspective on local graph clustering. Mathematical Programming, 2019, 174, 553-573.	2.4	6
14	Alchemist: An Apache Spark â‡" MPI interface. Concurrency Computation Practice and Experience, 2018, 31, e5026.	2.2	9
15	A local perspective on community structure in multilayer networks. Network Science, 2017, 5, 144-163.	1.0	42
16	A Multi-Platform Evaluation of the Randomized CX Low-Rank Matrix Factorization in Spark. , 2016, , .		2
17	RandNLA. Communications of the ACM, 2016, 59, 80-90.	4.5	119
18	Think locally, act locally: Detection of small, medium-sized, and large communities in large networks. Physical Review E, 2015, 91, 012821.	2.1	88

#	ARTICLE	IF	CITATIONS
19	Community Structure in Large Networks: Natural Cluster Sizes and the Absence of Large Well-Defined Clusters. Internet Mathematics, 2009, 6, 29-123.	0.7	1,246
20	Fast Monte Carlo Algorithms for Matrices I: Approximating Matrix Multiplication. SIAM Journal on Computing, 2006, 36, 132-157.	1.0	288