Michael G Rabbat

List of Publications by Year
in descending order

72 papers	3,176 citations	394390 19 h-index	454934 30 g-index
73 all docs	73 docs citations	73 times ranked	2206 citing authors

#	Article	IF	Citations
1	Gossip Algorithms for Distributed Signal Processing. Proceedings of the IEEE, 2010, 98, 1847-1864.	21.3	659
2	Network Topology and Communication-Computation Tradeoffs in Decentralized Optimization. Proceedings of the IEEE, 2018, 106, 953-976.	21.3	258
3	Learning Graphs From Data: A Signal Representation Perspective. IEEE Signal Processing Magazine, 2019, 36, 44-63.	5.6	248
4	Distributed Average Consensus With Dithered Quantization. IEEE Transactions on Signal Processing, 2008, 56, 4905-4918.	5.3	243
5	Push-Sum Distributed Dual Averaging for convex optimization. , 2012, , .		179
6	Advancing machine learning for MR image reconstruction with an open competition: Overview of the 2019 fastMRI challenge. Magnetic Resonance in Medicine, 2020, 84, 3054-3070.	3.0	154
7	fastMRI: A Publicly Available Raw k-Space and DICOM Dataset of Knee Images for Accelerated MR Image Reconstruction Using Machine Learning. Radiology: Artificial Intelligence, 2020, 2, e190007.	5.8	152
8	Consensus-based distributed optimization: Practical issues and applications in large-scale machine learning. , 2012, , .		131
9	Approximating signals supported on graphs. , 2012, , .		97
10	Distributed Average Consensus using Probabilistic Quantization. , 2007, , .		89
11	Characterization and Inference of Graph Diffusion Processes From Observations of Stationary Signals. IEEE Transactions on Signal and Information Processing Over Networks, 2018, 4, 481-496.	2.8	83
12	Distributed dual averaging for convex optimization under communication delays. , 2012, , .		69
13	A Multisensor Multi-Bernoulli Filter. IEEE Transactions on Signal Processing, 2017, 65, 5495-5509.	5.3	68
14	Distributed consensus and optimization under communication delays. , 2011, , .		56
15	Distributed strongly convex optimization. , 2012, , .		45
16	Distributed auxiliary particle filters using selective gossip. , 2011, , .		39
17	Broadcast Gossip Algorithms for Consensus on Strongly Connected Digraphs. IEEE Transactions on Signal Processing, 2013, 61, 3959-3971.	5.3	36
18	Graph spectral compressed sensing for sensor networks. , 2012, , .		33

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19	Greedy Gossip With Eavesdropping. IEEE Transactions on Signal Processing, 2010, 58, 3765-3776.	5.3	31
20	Background Subtraction for Online Calibration of Baseline RSS in RF Sensing Networks. IEEE Transactions on Mobile Computing, 2013, 12, 2386-2398.	5.8	31
21	Network Inference From Co-Occurrences. IEEE Transactions on Information Theory, 2008, 54, 4053-4068.	2.4	29
22	Degree correlation in scale-free graphs. European Physical Journal B, 2013, 86, 1.	1.5	29
23	A Distributed Particle Filter for Bearings-Only Tracking on Spherical Surfaces. IEEE Signal Processing Letters, 2016, 23, 326-330.	3.6	28
24	Efficient Decentralized Approximation via Selective Gossip. IEEE Journal on Selected Topics in Signal Processing, 2011, 5, 805-816.	10.8	25
25	Advances in Asynchronous Parallel and Distributed Optimization. Proceedings of the IEEE, 2020, 108, 2013-2031.	21.3	25
26	Multi-agent mirror descent for decentralized stochastic optimization. , 2015, , .		24
27	Asynchronous Gradient Push. IEEE Transactions on Automatic Control, 2021, 66, 168-183.	5.7	23
28	Qualities and Inequalities in Online Social Networks through the Lens of the Generalized Friendship Paradox. PLoS ONE, 2016, 11, e0143633.	2.5	22
29	Inferring sparse graphs from smooth signals with theoretical guarantees. , 2017, , .		21
30	Efficient Distributed Online Prediction and Stochastic Optimization With Approximate Distributed Averaging. IEEE Transactions on Signal and Information Processing Over Networks, 2016, 2, 489-506.	2.8	20
31	Directed by Directionality: Benefiting from the Gain Pattern of Active RFID Badges. IEEE Transactions on Mobile Computing, 2012, 11, 865-877.	5.8	19
32	Compressed Network Monitoring. , 2007, , .		16
33	Rates of convergence for greedy gossip with eavesdropping. , 2008, , .		14
34	Anomaly Detection Using Proximity Graph and PageRank Algorithm. IEEE Transactions on Information Forensics and Security, 2012, 7, 1288-1300.	6.9	14
35	Reconstructing a graph from path traces. , 2013, , .		13
36	Networked optimization with adaptive communication. , 2013, , .		13

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37	Towards a spectral characterization of signals supported on small-world networks. , 2014, , .		10
38	Active Learning of Multiple Source Multiple Destination Topologies. IEEE Transactions on Signal Processing, 2014, 62, 1926-1937.	5.3	9
39	Distributed adaptive diverse routing for voice-over-IP in service overlay networks. IEEE Transactions on Network and Service Management, 2009, 6, 175-189.	4.9	8
40	Detecting Convoys Using License Plate Recognition Data. IEEE Transactions on Signal and Information Processing Over Networks, 2016, 2, 391-405.	2.8	8
41	On Spatial Gossip Algorithms for Average Consensus. , 2007, , .		7
42	Selective Gossip. , 2009, , .		7
43	The ADMM algorithm for distributed averaging: Convergence rates and optimal parameter selection. , 2014, , .		7
44	Asynchronous decentralized optimization in heterogeneous systems. , 2014, , .		7
45	Error Propagation in Gossip-Based Distributed Particle Filters. IEEE Transactions on Signal and Information Processing Over Networks, 2015, 1, 148-163.	2.8	7
46	Graph Laplacian distributed particle filtering. , 2016, , .		7
47	Graph-Based Compression for Distributed Particle Filters. IEEE Transactions on Signal and Information Processing Over Networks, 2019, 5, 404-417.	2.8	7
48	Improved Bounds for Max Consensus in Wireless Networks. IEEE Transactions on Signal and Information Processing Over Networks, 2019, 5, 305-319.	2.8	7
49	Consensus-based distributed online prediction and optimization. , 2013, , .		6
50	An empirical comparison of multi-agent optimization algorithms. , 2017, , .		6
51	Time-Varying Mixtures of Markov Chains: An Application to Road Traffic Modeling. IEEE Transactions on Signal Processing, 2017, 65, 3152-3167.	5.3	4
52	Learning Minimum Delay Paths in Service Overlay Networks. , 2008, , .		3
53	The speed of greed: Characterizing myopic gossip through network voracity. , 2009, , .		3
54	RSS-based node localization in the presence of attenuating objects. , 2011, , .		3

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55	Bounded confidence opinion dynamics with network constraints and localized distributed averaging. , 2012, , .		3
56	Maximum likelihood associative memories. , 2013, , .		3
57	Performance comparison of randomized gossip, broadcast gossip and collection tree protocol for distributed averaging. , 2013, , .		3
58	Efficiently reaching consensus on the largest entries of a vector. , 2012, , .		2
59	Voter model with arbitrary degree dependence: clout, confidence and irreversibility. European Physical Journal B, 2014, 87, 1.	1.5	2
60	Optimization and analysis of distributed averaging with memory. , 2009, , .		1
61	Convergence properties of normalized random incremental gradient algorithms for least-squares source localization. , 2012, , .		1
62	Random clique codes. , 2012, , .		1
63	TOP-K selective gossip. , 2012, , .		1
64	Sparse structured associative memories as efficient set-membership data structures. , 2013, , .		1
65	Cluster-based associative memories built from unreliable storage. , 2014, , .		1
66	Inferring network properties from fixed-choice design with strong and weak ties. , 2016, , .		1
67	Estimation of time-varying mixture models: An application to traffic estimation. , 2016, , .		1
68	Inferring Structural Characteristics of Networks With Strong and Weak Ties From Fixed-Choice Surveys. IEEE Transactions on Signal and Information Processing Over Networks, 2017, 3, 513-525.	2.8	1
69	Algorithms for the multi-sensor assignment problem in the δ-generalized labeled multi-Bernoulli filter. , 2017, , .		1
70	Detecting convoys in networks of short-ranged sensors. , 2014, , .		0
71	Particle weight approximation with clustering for gossip-based distributed particle filters. , 2015, , .		0
72	Performance investigation on constraint sufficient statistics distributed particle filter. , 2015, , .		0