Waheed U Bajwa

List of Publications by Year
in descending order

73	1,611	777949 13	488211 31
papers	citations	h-index	g-index

73	73	73	1698
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Real-Time In-Network Image Compression via Distributed Dictionary Learning. IEEE Transactions on Mobile Computing, 2023, 22, 472-486.	3.9	4
2	A linearly convergent algorithm for distributed principal component analysis. Signal Processing, 2022, 193, 108408.	2.1	13
3	A Hybrid Model-Based and Learning-Based Approach for Classification Using Limited Number of Training Samples. IEEE Open Journal of Signal Processing, 2022, 3, 49-70.	2.3	2
4	Time-varying Metamaterial-enabled Directional Modulation Schemes for Physical Layer Security in Wireless Communication Links. ACM Journal on Emerging Technologies in Computing Systems, 2022, 18, 1-20.	1.8	4
5	BRIDGE: Byzantine-Resilient Decentralized Gradient Descent. IEEE Transactions on Signal and Information Processing Over Networks, 2022, 8, 610-626.	1.6	18
6	Learning-Aided Physical Layer Attacks Against Multicarrier Communications in IoT. IEEE Transactions on Cognitive Communications and Networking, 2021, 7, 239-254.	4.9	8
7	Introduction to Information Theory and Data Science.. , 2021, , 1-43.		0
8	Sample Complexity Bounds for Dictionary Learning from Vector- and Tensor-Valued Data. , 2021, , 134-162.		2
9	Distributed Principal Subspace Analysis for Partitioned Big Data: Algorithms, Analysis, and Implementation. IEEE Transactions on Signal and Information Processing Over Networks, 2021, 7, 699-715.	1.6	7
10	Hyphylearn: A Domain Adaptation-Inspired Approach to Classification Using Limited Number of Training Samples. , 2021, , .		1
11	A Minimax Lower Bound for Low-Rank Matrix-Variate Logistic Regression. , 2021, , .		0
12	Learning Mixtures of Separable Dictionaries for Tensor Data: Analysis and Algorithms. IEEE Transactions on Signal Processing, 2020, 68, 33-48.	3.2	7
13	Tensor Regression Using Low-Rank and Sparse Tucker Decompositions. SIAM Journal on Mathematics of Data Science, 2020, 2, 944-966.	1.0	7
14	Scaling-Up Distributed Processing of Data Streams for Machine Learning. Proceedings of the IEEE, 2020, 108, 1984-2012.	16.4	11
15	Optimization for Data-Driven Learning and Control. Proceedings of the IEEE, 2020, 108, 1863-1868.	16.4	9
16	Adversary-Resilient Distributed and Decentralized Statistical Inference and Machine Learning: An Overview of Recent Advances Under the Byzantine Threat Model. IEEE Signal Processing Magazine, 2020, 37, 146-159.	4.6	49
17	Machine Learning From Distributed, Streaming Data [From the Guest Editors]. IEEE Signal Processing Magazine, 2020, 37, 11-13.	4.6	12
18	Revisiting Sparse Channel Estimation in Massive MIMO-OFDM Systems. , 2019, , .		1

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19	ByRDiE: Byzantine-Resilient Distributed Coordinate Descent for Decentralized Learning. IEEE Transactions on Signal and Information Processing Over Networks, 2019, 5, 611-627.	1.6	47
20	Fast and Communication-efficient Distributed Pca. , 2019, , .		8
21	ExSIS: Extended sure independence screening for ultrahigh-dimensional linear models. Signal Processing, 2019, 159, 33-48.	2.1	4
22	Sample Complexity Bounds for Low-Separation-Rank Dictionary Learning. , 2019, , .		2
23	PAC Learning from Distributed Data in the Presence of Malicious Nodes. , 2019, , .		0
24	Stochastic Optimization From Distributed Streaming Data in Rate-Limited Networks. IEEE Transactions on Signal and Information Processing Over Networks, 2019, 5, 152-167.	1.6	6
25	Minimax Lower Bounds on Dictionary Learning for Tensor Data. IEEE Transactions on Information Theory, 2018, 64, 2706-2726.	1.5	14
26	How Secure are Multicarrier Communication Systems Against Signal Exploitation Attacks?. , 2018, , .		4
27	Robust Distributed Dictionary Learning for In-Network Image Compression. , 2018, , .		2
28	Union of Subspaces Signal Detection In Subspace Interference. , 2018, , .		1
29	Flipping Large Classes on a Shoestring Budget. , 2018, , .		1
30	BYRDIE: A BYZANTINE-RESILIENT DISTRIBUTED LEARNING ALGORITHM. , 2018, , .		3
31	Detection Theory for Union of Subspaces. IEEE Transactions on Signal Processing, 2018, 66, 6347-6362.	3.2	13
32	Identifiability of Kronecker-Structured Dictionaries for Tensor Data. IEEE Journal on Selected Topics in Signal Processing, 2018, 12, 1047-1062.	7.3	11
33	A Low Tensor-Rank Representation Approach for Clustering of Imaging Data. IEEE Signal Processing Letters, 2018, 25, 1196-1200.	2.1	24
34	Sparsity-Based Joint NBI and Impulse Noise Mitigation in Hybrid PLC-Wireless Transmissions. IEEE Access, 2018, 6, 30280-30295.	2.6	12
35	On "Flipping" a Large Signal Processing Class [SP Education]. IEEE Signal Processing Magazine, 2017, 34, 158-170.	4.6	10
36	Recent developments in distributed dictionary learning. , 2017, , .		0

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37	Sample complexity bounds for dictionary learning of tensor data. , 2017, , .		6
38	Through-the-wall radar imaging using a distributed Quasi-Newton method. , 2017, , .		3
39	STARK: Structured dictionary learning through rank-one tensor recovery. , 2017, , .		12
40	Identification of kronecker-structured dictionaries: An asymptotic analysis. , 2017, , .		2
41	Generalized geometric programming for rate allocation in consensus. , 2017, , .		0
42	Sparsifying dictionary analysis for FIR MIMO channel-shortening equalizers. , 2016, , .		1
43	Revisiting maximal response-based local identification of overcomplete dictionaries. , 2016, , .		0
44	Clustering-aware structure-constrained low-rank representation model for learning human action attributes. , 2016, , .		4
45	RD-SVM: A resilient distributed support vector machine. , 2016, , .		9
46	Parametric dictionary learning for TWRI using distributed particle swarm optimization. , 2016, , .		4
47	Passive RFID for Object and Use Detection during Trauma Resuscitation. IEEE Transactions on Mobile Computing, 2016, 15, 924-937.	3.9	16
48	Cloud K-SVD: A Collaborative Dictionary Learning Algorithm for Big, Distributed Data. IEEE Transactions on Signal Processing, 2016, 64, 173-188.	3.2	70
49	Deterministic selection of pilot tones for compressive estimation of MIMO-OFDM channels. , 2015, , .		3
50	A general framework for the design and analysis of sparse FIR linear equalizers. , 2015, , .		9
51	Metric-Constrained Kernel Union of Subspaces. , 2015, , .		2
52	Hierarchical Union-of-Subspaces Model for Human Activity Summarization. , 2015, , .		5
53	A convergence analysis of distributed dictionary learning based on the K-SVD algorithm. , 2015, , .		3
54	Identification of Linear Time-Varying Systems Through Waveform Diversity. IEEE Transactions on Signal Processing, 2015, 63, 2070-2084.	3.2	10

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55	Learning the Nonlinear Geometry of High-Dimensional Data: Models and Algorithms. IEEE Transactions on Signal Processing, 2015, 63, 6229-6244.	3.2	18
56	Dictionary learning based nonlinear classifier training from distributed data. , 2014, , .		6
57	Geometrie manifold approximation using union of tangent patches. , 2014, , .		2
58	Revisiting robustness of the union-of-subspaces model for data-adaptive learning of nonlinear signal models. , 2014, , .		4
59	Subspace detection in a kernel space: The missing data case. , 2014, , .		2
60	A greedy, adaptive approach to learning geometry of nonlinear manifolds. , 2014, , .		2
61	Information in tweets: Analysis of a bufferless timing channel model. , 2014, , .		1
62	Capacity analysis of a discrete-time bufferless timing channel. , 2014, , .		1
63	A Constrained Random Demodulator for Sub-Nyquist Sampling. IEEE Transactions on Signal Processing, 2013, 61, 707-723.	3.2	24
64	Cloud K-SVD: Computing data-adaptive representations in the cloud. , 2013, , .		11
65	Target estimation in colocated MIMO radar via matrix completion. , 2013, , .		36
66	Toward Resource-Optimal Consensus Over the Wireless Medium. IEEE Journal on Selected Topics in Signal Processing, 2013, 7, 284-295.	7.3	15
67	Bits through bufferless queues. , 2013, , .		8
68	Resource tradeoffs in distributed subspace tracking over the wireless medium. , 2013, , .		3
69	Rapid sensing of underutilized, wideband spectrum using the Random Demodulator. , 2012, , .		1
70	Group model selection using marginal correlations: The good, the bad and the Ugly. , 2012, , .		2
71	Two are better than one: Fundamental parameters of frame coherence. Applied and Computational Harmonic Analysis, 2012, 33, 58-78.	1.1	46
72	Compressed Channel Sensing: A New Approach to Estimating Sparse Multipath Channels. Proceedings of the IEEE, 2010, 98, 1058-1076.	16.4	890

#	Article	IF	Citations
73	Why Gabor frames? Two fundamental measures of coherence and their role in model selection. Journal of Communications and Networks, 2010, 12, 289-307.	1.8	63