

# Alex Sim

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5408489/publications.pdf>

Version: 2024-02-01

81  
papers

656  
citations

1305906

8  
h-index

1051228

16  
g-index

81  
all docs

81  
docs citations

81  
times ranked

737  
citing authors

#	ARTICLE	IF	CITATIONS
1	Access Trends of In-network Cache for Scientific Data. , 2022, , .		1
2	Predicting Slow Network Transfers in Scientific Computing. , 2022, , .		1
3	Automated Feature Selection for Anomaly Detection in Network Traffic Data. ACM Transactions on Management Information Systems, 2021, 12, 1-28.	2.1	8
4	Asynchronous I/O Strategy for Large-Scale Deep Learning Applications. , 2021, , .		2
5	An In-Depth I/O Pattern Analysis in HPC Systems. , 2021, , .		2
6	Predicting Resource Requirement in Intermediate Palomar Transient Factory Workflow. , 2020, , .		0
7	Clustering Life Course to Understand the Heterogeneous Effects of Life Events, Gender, and Generation on Habitual Travel Modes. IEEE Access, 2020, 8, 190964-190980.	2.6	5
8	Software-Defined Network for End-to-end Networked Science at the Exascale. Future Generation Computer Systems, 2020, 110, 181-201.	4.9	7
9	Cross-facility science with the Superfacility Project at LBNL. , 2020, , .		19
10	Feature Selection Improves Tree-based Classification for Wireless Intrusion Detection. , 2020, , .		13
11	Analyzing Scientific Data Sharing Patterns for In-network Data Caching. , 2020, , .		1
12	Transfer Learning Approach for Botnet Detection Based on Recurrent Variational Autoencoder. , 2020, , .		4
13	Access Patterns to Disk Cache for Large Scientific Archive. , 2020, , .		1
14	Towards HPC I/O Performance Prediction through Large-scale Log Analysis. , 2020, , .		17
15	Evaluation of Deep Learning Models for Network Performance Prediction for Scientific Facilities. , 2020, , .		3
16	GPU-based Classification for Wireless Intrusion Detection. , 2020, , .		3
17	HPC Workload Characterization Using Feature Selection and Clustering. , 2020, , .		8
18	Enhancing IoT Anomaly Detection Performance for Federated Learning. , 2020, , .		6

#	ARTICLE	IF	CITATIONS
19	Botnet Detection Using Recurrent Variational Autoencoder. , 2020, , .		6
20	Effective Missing Value Imputation Methods for Building Monitoring Data. , 2020, , .		7
21	DCA-IO: A Dynamic I/O Control Scheme for Parallel and Distributed File Systems. , 2019, , .		10
22	Co-optimizing Latency and Energy for IoT services using HMP servers in Fog Clusters. , 2019, , .		3
23	Automatic Detection of Network Traffic Anomalies and Changes. , 2019, , .		6
24	Multidimensional Compression with Pattern Matching. , 2019, , .		0
25	Performance Prediction for Data Transfers in LCLS Workflow. , 2019, , .		3
26	Similarity-based Compression with Multidimensional Pattern Matching. , 2019, , .		0
27	Evaluating the Effects of Missing Values and Mixed Data Types on Social Sequence Clustering Using t-SNE Visualization. Journal of Data and Information Quality, 2019, 11, 1-22.	1.5	7
28	A New Approach to Multivariate Network Traffic Analysis. Journal of Computer Science and Technology, 2019, 34, 388-402.	0.9	4
29	Federated Wireless Network Intrusion Detection. , 2019, , .		27
30	Spatiotemporal Real-Time Anomaly Detection for Supercomputing Systems. , 2019, , .		1
31	A Reinforcement Learning Based Network Scheduler for Deadline-Driven Data Transfers. , 2019, , .		10
32	Multivariate network traffic analysis using clustered patterns. Computing (Vienna/New York), 2019, 101, 339-361.	3.2	11
33	Consensus Ensemble System for Traffic Flow Prediction. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 3903-3914.	4.7	32
34	Predicting Network Traffic Using TCP Anomalies. , 2018, , .		1
35	SDN for End-to-End Networked Science at the Exascale (SENSE). , 2018, , .		10
36	Dynamic Online Performance Optimization in Streaming Data Compression. , 2018, , .		2

#	ARTICLE	IF	CITATIONS
37	Auto-Tuned Publisher in a Pub/Sub System: Design and Performance Evaluation. , 2018, , .		2
38	Spatio-Temporal Analysis of HPC I/O and Connection Data. , 2018, , .		1
39	Modeling Data Transfers: Change Point and Anomaly Detection. , 2018, , .		3
40	Identifying Anomalous File Transfer Events in LCLS Workflow. , 2018, , .		4
41	Towards Autonomic Science Infrastructure. , 2018, , .		8
42	Expanding Statistical Similarity Based Data Reduction to Capture Diverse Patterns. , 2017, , .		2
43	An approach to online network monitoring using clustered patterns. , 2017, , .		5
44	A lightweight network anomaly detection technique. , 2017, , .		3
45	A New Approach to Online, Multivariate Network Traffic Analysis. , 2017, , .		1
46	Statistical data reduction for streaming data. , 2017, , .		6
47	Parallel Variable Selection for Effective Performance Prediction. , 2017, , .		5
48	Feature Engineering and Classification Models for Partial Discharge Events in Power Transformers. , 2017, , .		0
49	Improving Statistical Similarity Based Data Reduction for Non-Stationary Data. , 2017, , .		3
50	Accurate signal timing from high frequency streaming data. , 2017, , .		1
51	Convolutional Filtering for Accurate Signal Timing from Noisy Streaming Data. , 2017, , .		1
52	Data quality challenges with missing values and mixed types in joint sequence analysis. , 2017, , .		6
53	Towards Real-Time Detection and Tracking of Spatio-Temporal Features: Blob-Filaments in Fusion Plasma. IEEE Transactions on Big Data, 2016, 2, 262-275.	4.4	13
54	Performance Analysis Tool for HPC and Big Data Applications on Scientific Clusters. , 2016, , 139-161.		2

#	ARTICLE	IF	CITATIONS
55	Time-Series Forecast Modeling on High-Bandwidth Network Measurements. Journal of Grid Computing, 2016, 14, 463-476.	2.5	16
56	Machine learning based job status prediction in scientific clusters. , 2016, , .		10
57	Novel Data Reduction Based on Statistical Similarity. , 2016, , .		13
58	Extracting Baseline Electricity Usage Using Gradient Tree Boosting. , 2015, , .		5
59	Named Data Networking in Climate Research and HEP Applications. Journal of Physics: Conference Series, 2015, 664, 052033.	0.3	11
60	Best Predictive Generalized Linear Mixed Model with Predictive Lasso for High-Speed Network Data Analysis. International Journal of Statistics and Probability, 2015, 4, .	0.1	2
61	PATHA: Performance Analysis Tool for HPC Applications. , 2015, , .		4
62	Network bandwidth utilization forecast model on high bandwidth networks. , 2015, , .		14
63	Adaptation and Policy-Based Resource Allocation for Efficient Bulk Data Transfers in High Performance Computing Environments. , 2014, , .		2
64	Efficient Data Staging Using Performance-Based Adaptation and Policy-Based Resource Allocation. , 2014, , .		2
65	Estimating and Forecasting Network Traffic Performance Based on Statistical Patterns Observed in SNMP Data. Lecture Notes in Computer Science, 2013, , 601-615.	1.0	13
66	What SNMP Data Can Tell Us about Edge-to-Edge Network Performance. Lecture Notes in Computer Science, 2013, , 267-269.	1.0	2
67	Experiences with 100Gbps network applications. , 2012, , .		11
68	Adaptive Data Transfers that Utilize Policies for Resource Sharing. , 2012, , .		3
69	StorNet: Co-scheduling of end-to-end bandwidth reservation on storage and network systems for high-performance data transfers. , 2011, , .		9
70	StorNet: Integrated Dynamic Storage and Network Resource Provisioning and Management for Automated Data Transfers. Journal of Physics: Conference Series, 2011, 331, 012002.	0.3	4
71	Efficient Bulk Data Replication for the EarthSystem Grid. , 2011, , 435-444.		4
72	Lessons learned from moving earth system grid data sets over a 20 Gbps wide-area network. , 2010, , .		18

#	ARTICLE	IF	CITATIONS
73	A Flexible Reservation Algorithm for Advance Network Provisioning. , 2010, , .		49
74	The Earth System Grid: Enabling Access to Multimodel Climate Simulation Data. Bulletin of the American Meteorological Society, 2009, 90, 195-206.	1.7	93
75	Practical Grid Storage Interoperation. Journal of Grid Computing, 2009, 7, 309-317.	2.5	0
76	Dynamic Storage Management. Chapman & Hall/CRC Computational Science, 2009, , .	0.5	0
77	Efficient Operational Profiling of Systems Using Suffix Arrays on Execution Logs. , 2008, , .		1
78	Storage Resource Managers: Recent International Experience on Requirements and Multiple Co-Operating Implementations. , 2007, , .		11
79	High-performance remote access to climate simulation data: a challenge problem for data grid technologies. Parallel Computing, 2003, 29, 1335-1356.	1.3	45
80	New capabilities in the HENP Grand Challenge Storage Access System and its application at RHIC. Computer Physics Communications, 2001, 140, 179-188.	3.0	1
81	Invariant representation and hierarchical network for inspection of nuts from X-ray images. International Journal of Imaging Systems and Technology, 1996, 7, 231-237.	2.7	6