Mark Crovella

List of Publications by Year
in descending order

62 papers	6,779 citations	430843 18 h-index	330122 37 g-index
63 all docs	63 docs citations	63 times ranked	3711 citing authors

#	Article	IF	Citations
1	Self-similarity in World Wide Web traffic: evidence and possible causes. IEEE/ACM Transactions on Networking, 1997, 5, 835-846.	3.8	2,006
2	Diagnosing network-wide traffic anomalies. , 2004, , .		631
3	Mining anomalies using traffic feature distributions. Computer Communication Review, 2005, 35, 217-228.	1.8	386
4	Generating representative Web workloads for network and server performance evaluation. Performance Evaluation Review, 1998, 26, 151-160.	0.6	335
5	Diagnosing network-wide traffic anomalies. Computer Communication Review, 2004, 34, 219-230.	1.8	318
6	Characterization of network-wide anomalies in traffic flows. , 2004, , .		304
7	Delegation forwarding. , 2008, , .		278
8	Structural analysis of network traffic flows. , 2004, , .		243
9	On Choosing a Task Assignment Policy for a Distributed Server System. Journal of Parallel and Distributed Computing, 1999, 59, 204-228.	4.1	238
10	Changes in Web client access patterns: Characteristics and caching implications. World Wide Web, 1999, 2, 15-28.	4.0	233
11	Constraint-Based Geolocation of Internet Hosts. IEEE/ACM Transactions on Networking, 2006, 14, 1219-1232.	3.8	215
12	Virtual landmarks for the internet. , 2003, , .		194
13	Structural analysis of network traffic flows. Performance Evaluation Review, 2004, 32, 61-72.	0.6	159
14	On the marginal utility of network topology measurements. , 2001, , .		112
15	On the geographic location of internet resources. IEEE Journal on Selected Areas in Communications, 2003, 21, 934-948.	14.0	106
16	Describing and forecasting video access patterns. , 2011, , .		96
17	Going the Distance for Protein Function Prediction: A New Distance Metric for Protein Interaction Networks. PLoS ONE, 2013, 8, e76339.	2.5	94
18	Diversity of forwarding paths in pocket switched networks. , 2007, , .		90

#	Article	IF	Citations
19	Efficient algorithms for large-scale topology discovery. , 2005, , .		75
20	A performance evaluation of hyper text transfer protocols. , 1999, , .		70
21	Measuring Web performance in the wide area. Performance Evaluation Review, 1999, 27, 37-48.	0.6	59
22	Deployment of an Algorithm for Large-Scale Topology Discovery. IEEE Journal on Selected Areas in Communications, 2006, 24, 2210-2220.	14.0	54
23	Network Kriging. IEEE Journal on Selected Areas in Communications, 2006, 24, 2263-2272.	14.0	51
24	Single-cell transcriptional networks in differentiating preadipocytes suggest drivers associated with tissue heterogeneity. Nature Communications, 2020, 11, 2117.	12.8	37
25	Using loss pairs to discover network properties. , 2001, , .		29
26	Improved Algorithms for Network Topology Discovery. Lecture Notes in Computer Science, 2005, , 149-162.	1.3	29
27	A performance evaluation of hyper text transfer protocols. Performance Evaluation Review, 1999, 27, 188-197.	0.6	26
28	Functional protein representations from biological networks enable diverse cross-species inference. Nucleic Acids Research, 2019, 47, e51-e51.	14.5	23
29	One for all and all for One: Improving replication of genetic studies through network diffusion. PLoS Genetics, 2018, 14, e1007306.	3.5	22
30	Critical path analysis of TCP transactions. Computer Communication Review, 2000, 30, 127-138.	1.8	22
31	Geometric Exploration of the Landmark Selection Problem. Lecture Notes in Computer Science, 2004, , 63-72.	1.3	19
32	Community-oriented network measurement infrastructure (CONMI) workshop report. Computer Communication Review, 2006, 36, 41-48.	1.8	19
33	Inferring invisible traffic. , 2010, , .		19
34	Efficient algorithms for large-scale topology discovery. Performance Evaluation Review, 2005, 33, 327-338.	0.6	19
35	Learning network structure from passive measurements. , 2007, , .		16
36	Locality in a web of streams. Communications of the ACM, 2005, 48, 82-88.	4.5	12

#	Article	IF	Citations
37	Understanding geolocation accuracy using network geometry. , 2013, , .		12
38	Internet performance modeling: the state of the art at the turn of the century. Performance Evaluation, 2000, 42, 91-108.	1.2	11
39	The Advantages of Multiple Parallelizations in Combinatorial Search. Journal of Parallel and Distributed Computing, 1994, 21, 110-123.	4.1	10
40	Router primitives for programmable active measurement. , 2009, , .		10
41	A statistical framework for efficient monitoring of end-to-end network properties. , 2005, , .		9
42	Analysis of brain region-specific co-expression networks reveals clustering of established and novel genes associated with Alzheimer disease. Alzheimer's Research and Therapy, 2020, 12, 103.	6.2	9
43	Closed-Loop Opinion Formation. , 2017, , .		8
44	On the emergence of highly variable distributions in the autonomous system topology. Computer Communication Review, 2003, 33, 41-49.	1.8	7
45	On the choice of a spanning tree for greedy embedding of network graphs. Networking Science, 2013, 3, 2-12.	1.2	7
46	Critical path analysis of TCP transactions. Computer Communication Review, 2001, 31, 80-102.	1.8	6
47	Corrections to "How Does TCP Generate Pseudo-Self-Similarity?". Computer Communication Review, 2002, 32, 30-30.	1.8	6
48	Long range mutual information. Performance Evaluation Review, 2008, 36, 32-37.	0.6	6
49	Estimating intrinsic dimension via clustering. , 2012, , .		5
50	Low-stretch greedy embedding heuristics. , 2012, , .		5
51	Online ratings: Convergence towards a positive perspective?. , 2014, , .		5
52	Interpretable network propagation with application to expanding the repertoire of human proteins that interact with SARS-CoV-2. GigaScience, 2021, 10, .	6.4	5
53	Inferring visibility. Computer Communication Review, 2012, 42, 151-162.	1.8	4
54	Mixture models of endhost network traffic. , 2013, , .		3

#	Article	IF	Citations
55	Assessing Candidate Preference through Web Browsing History. , 2018, , .		3
56	A statistical framework for efficient monitoring of end-to-end network properties. Performance Evaluation Review, 2005, 33, 390-391.	0.6	2
57	Ranking of ACM SIGCOMM computer communication review. Computer Communication Review, 2008, 38, 79-80.	1.8	2
58	Leveraging Website Popularity Differences to Identify Performance Anomalies. , 2021, , .		1
59	The skillful interrogation of the internet. Computer Communication Review, 2019, 49, 14-15.	1.8	1
60	Matrix (factorization) reloaded: flexible methods for imputing genetic interactions with cross-species and side information. Bioinformatics, 2020, 36, i866-i874.	4.1	1
61	A fine-grained distance metric for analyzing Internet topology. , 2012, , .		0
62	Curvature-based Analysis of Network Connectivity in Private Backbone Infrastructures. Proceedings of the ACM on Measurement and Analysis of Computing Systems, 2022, 6, 1-32.	1.8	0