

Sonia Fahmy

List of Publications by Year in descending order

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Version: 2024-02-01

103
papers

5,719
citations

430874

18
h-index

265206

42
g-index

109
all docs

109
docs citations

109
times ranked

3574
citing authors

#	ARTICLE	IF	CITATIONS
1	AI-Driven Provisioning in the 5G Core. IEEE Internet Computing, 2021, 25, 18-25.	3.3	6
2	Competitive Online Convex Optimization With Switching Costs and Ramp Constraints. IEEE/ACM Transactions on Networking, 2021, 29, 876-889.	3.8	7
3	Invenio. , 2021, , .		0
4	Procedure-driven deployment support for the microservice era. , 2021, , .		0
5	The Cost of Stateless Network Functions in 5G. , 2021, , .		7
6	Infinity Learning: Learning Markov Chains from Aggregate Steady-State Observations. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 3922-3929.	4.9	1
7	RoCC. , 2020, , .		22
8	Nascent: Tackling Caller-ID Spoofing in 4G Networks via Efficient Network-Assisted Validation. , 2019, , .		3
9	CoRE: Non-Linear 3D Sampling for Robust 360° Video Streaming. , 2019, , .		0
10	Mind Your Credit. , 2018, , .		20
11	Competitive Online Convex Optimization with Switching Costs and Ramp Constraints. , 2018, , .		13
12	Data-driven resource flexing for network functions visualization. , 2018, , .		4
13	Adaptive Deterrence of DNS Cache Poisoning. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2018, , 171-191.	0.3	3
14	Contain-ed. , 2017, , .		8
15	BEADS: Automated Attack Discovery in OpenFlow-Based SDN Systems. Lecture Notes in Computer Science, 2017, , 311-333.	1.3	19
16	Towards High Fidelity Network Emulation. , 2017, , .		0
17	Contain-ed. Computer Communication Review, 2017, 47, 54-60.	1.8	14
18	An empirical case for container-driven fine-grained VNF resource flexing. , 2016, , .		19

#	ARTICLE	IF	CITATIONS
19	Feluda: Provenance-Enabled Diagnosis of Elusive Network Failures in Wireless Sensor Networks. , 2016, , .		2
20	TPC chair's welcome. , 2015, , .		0
21	NFV-VITAL: A framework for characterizing the performance of virtual network functions. , 2015, , .		48
22	LiTMaS: Live road traffic maps for smartphones. , 2015, , .		6
23	ERUPT: Energy-efficient trustworthy provenance trees for wireless sensor networks. , 2014, , .		4
24	Flow-based partitioning of network testbed experiments. Computer Networks, 2014, 58, 141-157.	5.1	5
25	A practical approach for provenance transmission in wireless sensor networks. Ad Hoc Networks, 2014, 16, 28-45.	5.5	28
26	Pegasus: Precision hunting for icebergs and anomalies in network flows. , 2013, , .		11
27	EasyScale: Easy mapping for large-scale network security experiments. , 2013, , .		2
28	SYREN: Synergistic Link Correlation-Aware and Network Coding-Based Dissemination in Wireless Sensor Networks. , 2013, , .		15
29	Location matters: Eliciting responses to direct probes. , 2013, , .		1
30	An Experimental Framework for BGP Security Evaluation. IT - Information Technology, 2013, 55, 147-154.	0.9	0
31	Reducing the complexity of BGP stability analysis with hybrid combinatorial-algebraic models. , 2012, , .		3
32	An energy-efficient approach for provenance transmission in wireless sensor networks. , 2012, , .		6
33	Detecting unsafe BGP policies in a flexible world. , 2012, , .		8
34	Content retrieval using cloud-based DNS. , 2012, , .		6
35	Design and evaluation of the S<sup>3</sup> monitor network measurement service on GENI. , 2012, , .		7
36	Link correlation and network coding in broadcast protocols for wireless sensor networks. , 2012, , .		9

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37	Detecting the unintended in BGP policies. , 2012, , .		1
38	On the Cost of Network Inference Mechanisms. IEEE Transactions on Parallel and Distributed Systems, 2011, 22, 662-672.	5.6	4
39	Mitigating interference in a network measurement service. , 2011, , .		4
40	Energy-efficient provenance transmission in large-scale wireless sensor networks. , 2011, , .		5
41	Partitioning Network Testbed Experiments. , 2011, , .		4
42	Prediction models for long-term Internet prefix availability. Computer Networks, 2011, 55, 873-889.	5.1	2
43	Forwarding devices. ACM Transactions on Modeling and Computer Simulation, 2011, 21, 1-23.	0.8	9
44	BGP molecules: Understanding and predicting prefix failures. , 2011, , .		3
45	Omnify: Investigating the Visibility and Effectiveness of Copyright Monitors. Lecture Notes in Computer Science, 2011, , 122-132.	1.3	2
46	Message from the technical program committee chairs. , 2010, , .		0
47	Sleep/wake scheduling for multi-hop sensor networks: Non-convexity and approximation algorithm. Ad Hoc Networks, 2010, 8, 681-693.	5.5	12
48	Predicting Prefix Availability in the Internet. , 2010, , .		4
49	Synergy: An overlay internetworking architecture and implementation. Journal of Communications and Networks, 2010, 12, 181-190.	2.6	8
50	Constructing Maximum-Lifetime Data-Gathering Forests in Sensor Networks. IEEE/ACM Transactions on Networking, 2010, 18, 1571-1584.	3.8	84
51	Distributed Partial Inference under Churn. , 2010, , .		2
52	Optimal Sleep/Wake Scheduling for Time-Synchronized Sensor Networks With QoS Guarantees. IEEE/ACM Transactions on Networking, 2009, 17, 1508-1521.	3.8	28
53	How to Test DoS Defenses. , 2009, , .		24
54	On the Impact of Filters on Analyzing Prefix Reachability in the Internet. , 2009, , .		0

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55	Issues and challenges in securing VoIP. Computers and Security, 2009, 28, 743-753.	6.0	41
56	Accurately Measuring Denial of Service in Simulation and Testbed Experiments. IEEE Transactions on Dependable and Secure Computing, 2009, 6, 81-95.	5.4	51
57	On the Utility of Inference Mechanisms. , 2009, , .		4
58	SYNC-NET: distributed time synchronization in clustered sensor networks. Wireless Communications and Mobile Computing, 2008, 8, 797-809.	1.2	1
59	Downscaling Network Scenarios with Denial of Service (DoS) Attacks. , 2008, , .		3
60	Experimental comparison of peer-to-peer streaming overlays: An application perspective. , 2008, , .		31
61	Fidelity of network simulation and emulation. ACM Transactions on Modeling and Computer Simulation, 2008, 19, 1-29.	0.8	21
62	Resource management in an active measurement service. , 2008, , .		9
63	Analyzing video services in Web 2.0. , 2008, , .		57
64	Towards user-centric metrics for denial-of-service measurement. , 2007, , .		36
65	On TCP throughput and window size in a multihop wireless network testbed. , 2007, , .		16
66	When is service really denied?. , 2007, , .		2
67	When is service really denied?. Performance Evaluation Review, 2007, 35, 357-358.	0.6	0
68	A Black-box Router Profiler. , 2007, , .		6
69	DDoS Benchmarks and Experimenter's Workbench for the DETER Testbed. , 2007, , .		11
70	Characterizing Overlay Multicast Networks and Their Costs. IEEE/ACM Transactions on Networking, 2007, 15, 373-386.	3.8	51
71	Wired/wireless internet communications. Computer Communications, 2007, 30, 1441-1442.	5.1	0
72	Optimal Sleep/Wake Scheduling for Time-Synchronized Sensor Networks with QoS Guarantees. IEEE International Workshop on Quality of Service, 2006, , .	0.0	21

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73	Measuring denial Of service. , 2006, , .		28
74	Optimistic load balancing in a distributed virtual environment. , 2006, , .		27
75	Optimal QoS-aware Sleep/Wake Scheduling for Time-Synchronized Sensor Networks. , 2006, , .		10
76	Benchmarks for DDOS Defense Evaluation. , 2006, , .		24
77	A Secure Programming Paradigm for Network Virtualization. , 2006, , .		4
78	Path-aware overlay multicast. Computer Networks, 2005, 47, 23-45.	5.1	29
79	Monitoring and controlling QoS network domains. International Journal of Network Management, 2005, 15, 11-29.	2.2	12
80	Latency-sensitive power control for wireless ad-hoc networks. , 2005, , .		13
81	An Architecture for Robust Sensor Network Communications. International Journal of Distributed Sensor Networks, 2005, 1, 305-327.	2.2	38
82	FlowMate: scalable on-line flow clustering. IEEE/ACM Transactions on Networking, 2005, 13, 288-301.	3.8	23
83	HEED: a hybrid, energy-efficient, distributed clustering approach for ad hoc sensor networks. IEEE Transactions on Mobile Computing, 2004, 3, 366-379.	5.8	3,871
84	On detecting service violations and bandwidth theft in QoS network domains. Computer Communications, 2003, 26, 861-871.	5.1	25
85	Analysis of vulnerabilities in Internet firewalls. Computers and Security, 2003, 22, 214-232.	6.0	81
86	Constraint-based routing in the internet: Basic principles and recent research. IEEE Communications Surveys and Tutorials, 2003, 5, 2-13.	39.4	87
87	Topology-aware overlay networks for group communication. , 2002, , .		141
88	<title>Comparison of load-based and queue-based active queue management algorithms</title>. , 2002, , .		21
89	Design and Simulation of Asynchronous Transfer Mode-Available Bit Rate End System Congestion Control. Simulation, 2002, 78, 150-162.	1.8	1
90	Fair flow control for ATM-ABR multipoint connections. Computer Communications, 2002, 25, 741-755.	5.1	2

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91	A Framework for Understanding Vulnerabilities in Firewalls Using a Dataflow Model of Firewall Internals. <i>Computers and Security</i> , 2001, 20, 263-270.	6.0	31
92	Buffer management and rate guarantees for TCP over satellite-ATM networks. <i>International Journal of Satellite Communications and Networking</i> , 2001, 19, 111-139.	0.6	11
93	A Survey of Application Layer Techniques for Adaptive Streaming of Multimedia. <i>Real Time Imaging</i> , 2001, 7, 221-235.	1.6	65
94	General weighted fairness and its support in explicit rate switch algorithms. <i>Computer Communications</i> , 2000, 23, 149-161.	5.1	18
95	The ERICA switch algorithm for ABR traffic management in ATM networks. <i>IEEE/ACM Transactions on Networking</i> , 2000, 8, 87-98.	3.8	163
96	Design and evaluation of feedback consolidation for ABR point-to-multipoint connections in ATM networks. <i>Computer Communications</i> , 1999, 22, 1085-1103.	5.1	6
97	Quality of service for Internet traffic over ATM service categories. <i>Computer Communications</i> , 1999, 22, 1307-1320.	5.1	6
98	Dynamic queue control functions for ATM ABR switch schemes: design and analysis. <i>Computer Networks</i> , 1999, 31, 1935-1949.	5.1	9
99	Improving the performance of TCP over the ATM-UBR service. <i>Computer Communications</i> , 1998, 21, 898-911.	5.1	42
100	Use-it-or-lose-it policies for the available bit rate (ABR) service in ATM networks. <i>Computer Networks</i> , 1998, 30, 2293-2308.	1.0	4
101	Design considerations for the virtual source/virtual destination (VS/VD) feature in the ABR service of ATM networks. <i>Computer Networks</i> , 1998, 30, 1811-1824.	1.0	13
102	<title>Fairness for ABR multipoint-to-point connections</title>. , 1998, , .		11
103	<title>Simulation study of World Wide Web traffic over the ATM ABR service</title>. , 1998, , .		2