Antonio PescapÃ¨

List of Publications by Year
in descending order

142 papers	8,202 citations

87888
38 h-index	

56724
83 g-index	

145 all docs	145 docs citations

145 times ranked	7494 citing authors

#	Article	IF	Citations
1	Integration of Cloud computing and Internet of Things: A survey. Future Generation Computer Systems, 2016, 56, 684-700.	7.5	1,726
2	Cloud monitoring: A survey. Computer Networks, 2013, 57, 2093-2115.	5.1	462
3	Issues and future directions in traffic classification. IEEE Network, 2012, 26, 35-40.	6.9	455
4	A tool for the generation of realistic network workload for emerging networking scenarios. Computer Networks, 2012, 56, 3531-3547.	5.1	410
5	Industry 4.0 and Health: Internet of Things, Big Data, and Cloud Computing for HealthcareÂ4.0. Journal of Industrial Information Integration, 2020, 18, 100129.	6.4	365
6	On the Integration of Cloud Computing and Internet of Things. , 2014, , .		357
7	Mobile Encrypted Traffic Classification Using Deep Learning: Experimental Evaluation, Lessons Learned, and Challenges. IEEE Transactions on Network and Service Management, 2019, 16, 445-458.	4.9	333
8	The role of Information and Communication Technologies in healthcare: taxonomies, perspectives, and challenges. Journal of Network and Computer Applications, 2018, 107, 125-154.	9.1	256
9	A Survey on Information and Communication Technologies for Industry 4.0: State-of-the-Art, Taxonomies, Perspectives, and Challenges. IEEE Communications Surveys and Tutorials, 2019, 21, 3467-3501.	39.4	216
10	MIMETIC: Mobile encrypted traffic classification using multimodal deep learning. Computer Networks, 2019, 165, 106944.	5.1	179
11	A Consensus-Based Approach for Platooning with Intervehicular Communications and Its Validation in Realistic Scenarios. IEEE Transactions on Vehicular Technology, 2017, 66, 1985-1999.	6.3	151
12	Multi-classification approaches for classifying mobile app traffic. Journal of Network and Computer Applications, 2018, 103, 131-145.	9.1	140
13	Precision Medicine and Artificial Intelligence: A Pilot Study on Deep Learning for Hypoglycemic Events Detection based on ECG. Scientific Reports, 2020, 10, 170.	3.3	114
14	A Secure Adaptive Control for Cooperative Driving of Autonomous Connected Vehicles in the Presence of Heterogeneous Communication Delays and Cyberattacks. IEEE Transactions on Cybernetics, 2021, 51, 1134-1149.	9.5	106
15	XAI Meets Mobile Traffic Classification: Understanding and Improving Multimodal Deep Learning Architectures. IEEE Transactions on Network and Service Management, 2021, 18, 4225-4246.	4.9	102
16	A sleep scheduling approach based on learning automata for WSN partialcoverage. Journal of Network and Computer Applications, 2017, 80, 67-78.	9.1	94
17	Toward effective mobile encrypted traffic classification through deep learning. Neurocomputing, 2020, 409, 306-315.	5.9	90
18	SmartBlock-SDN: An Optimized Blockchain-SDN Framework for Resource Management in IoT. IEEE Access, 2021, 9, 28361-28376.	4.2	87

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19	Broadband internet performance. Computer Communication Review, 2011, 41, 134-145.	1.8	79
20	Mobile Encrypted Traffic Classification Using Deep Learning. , 2018, , .		78
21	A collaborative approach for improving the security of vehicular scenarios: The case of platooning. Computer Communications, 2018, 122, 59-75.	5.1	73
22	Internet traffic modeling by means of Hidden Markov Models. Computer Networks, 2008, 52, 2645-2662.	5.1	69
23	Do you trust your software-based traffic generator?. , 2010, 48, 158-165.		69
24	Computational intelligence intrusion detection techniques in mobile cloud computing environments: Review, taxonomy, and open research issues. Journal of Information Security and Applications, 2020, 55, 102582.	2.5	69
25	Platooning Maneuvers in Vehicular Networks: A Distributed and Consensus-Based Approach. IEEE Transactions on Intelligent Vehicles, 2019, 4, 59-72.	12.7	68
26	DISTILLER: Encrypted traffic classification via multimodal multitask deep learning. Journal of Network and Computer Applications, 2021, 183-184, 102985.	9.1	68
27	Traffic analysis of peer-to-peer IPTV communities. Computer Networks, 2009, 53, 470-484.	5.1	66
28	Anonymity Services Tor, I2P, JonDonym: Classifying in the Dark (Web). IEEE Transactions on Dependable and Secure Computing, 2020, 17, 662-675.	5.4	62
29	Early Classification of Network Traffic through Multi-classification. Lecture Notes in Computer Science, 2011, , 122-135.	1.3	55
30	Classification of Network Traffic via Packet-Level Hidden Markov Models. , 2008, , .		52
31	Traffic identification engine: an open platform for traffic classification. IEEE Network, 2014, 28, 56-64.	6.9	52
32	Benchmarking big data architectures for social networks data processing using public cloud platforms. Future Generation Computer Systems, 2018, 89, 98-109.	7.5	52
33	Software-Defined Cloud Computing: A Systematic Review on Latest Trends and Developments. IEEE Access, 2019, 7, 93294-93314.	4.2	52
34	A Dive into the Dark Web: Hierarchical Traffic Classification of Anonymity Tools. IEEE Transactions on Network Science and Engineering, 2020, 7, 1043-1054.	6.4	52
35	Internet Censorship detection: A survey. Computer Networks, 2015, 83, 381-421.	5.1	48
36	Analysis of a â€œ0â€•Stealth Scan From a Botnet. IEEE/ACM Transactions on Networking, 2015, 23, 341-354.	3.8	47

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37	A comprehensive survey on internet outages. Journal of Network and Computer Applications, 2018, 113, 36-63.	9.1	47
38	FPFTS: A joint fuzzy particle swarm optimization mobility‑aware approach to fog task scheduling algorithm for Internet of Things devices. Software - Practice and Experience, 2021, 51, 2519-2539.	3.6	45
39	Characterization and Prediction of Mobile-App Traffic Using Markov Modeling. IEEE Transactions on Network and Service Management, 2021, 18, 907-925.	4.9	45
40	Quality of service statistics over heterogeneous networks: Analysis and applications. European Journal of Operational Research, 2008, 191, 1075-1088.	5.7	43
41	A cascade architecture for DoS attacks detection based on the wavelet transform. Journal of Computer Security, 2009, 17, 945-968.	0.8	41
42	Cloud monitoring: Definitions, issues and future directions. , 2012, , .		40
43	Challenges and solution for measuring available bandwidth in software defined networks. Computer Communications, 2017, 99, 48-61.	5.1	39
44	MIRAGE: Mobile-app Traffic Capture and Ground-truth Creation. , 2019, , .		38
45	Measuring network throughput in the cloud: The case of Amazon EC2. Computer Networks, 2015, 93, 408-422.	5.1	36
46	Measuring home broadband performance. Communications of the ACM, 2012, 55, 100-109.	4.5	35
47	Exploiting packet‑sampling measurements for traffic characterization and classification. International Journal of Network Management, 2012, 22, 451-476.	2.2	34
48	Topology Discovery at the Router Level: A New Hybrid Tool Targeting ISP Networks. IEEE Journal on Selected Areas in Communications, 2011, 29, 1776-1787.	14.0	33
49	MagNets - experiences from deploying a joint research-operational next-generation wireless access network testbed. , 2007, , .		32
50	TIE: A Community-Oriented Traffic Classification Platform. Lecture Notes in Computer Science, 2009, , 64-74.	1.3	31
51	Experimental evaluation and characterization of the magnets wireless backbone. , 2006, , .		28
52	Know your Big Data Trade-offs when Classifying Encrypted Mobile Traffic with Deep Learning. , 2019, , .		28
53	On the performance of the wide-area networks interconnecting public-cloud datacenters around the globe. Computer Networks, 2017, 112, 67-83.	5.1	27
54	Dynamic Service Management in Heterogeneous Networks. Journal of Network and Systems Management, 2004, 12, 349-370.	4.9	25

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55	Unified architecture for network measurement: The case of available bandwidth. Journal of Network and Computer Applications, 2012, 35, 1402-1414.	9.1	25
56	A Fuzzy Approach Based on Heterogeneous Metrics for Scaling Out Public Clouds. IEEE Transactions on Parallel and Distributed Systems, 2017, 28, 2117-2130.	5.6	24
57	FUPE: A security driven task scheduling approach for SDN-based IoTâ€"Fog networks. Journal of Information Security and Applications, 2021, 60, 102853.	2.5	24
58	A Markovian Approach to Multipath Data Transfer in Overlay Networks. IEEE Transactions on Parallel and Distributed Systems, 2010, 21, 1398-1411.	5.6	22
59	Analysis of Country-Wide Internet Outages Caused by Censorship. IEEE/ACM Transactions on Networking, 2014, 22, 1964-1977.	3.8	22
60	Mining agile DNS traffic using graph analysis for cybercrime detection. Computer Networks, 2016, 100, 28-44.	5.1	22
61	On the Network Performance of Amazon S3 Cloud-Storage Service. , 2016, , .		21
62	K-Dimensional Trees for Continuous Traffic Classification. Lecture Notes in Computer Science, 2010, , 141-154.	1.3	21
63	Packet-level prediction of mobile-app traffic using multitask Deep Learning. Computer Networks, 2021, 200, 108529.	5.1	20
64	Traffic Classification of Mobile Apps through Multi-Classification. , 2017, , .		19
65	A Big Data-Enabled Hierarchical Framework for Traffic Classification. IEEE Transactions on Network Science and Engineering, 2020, 7, 2608-2619.	6.4	19
66	A collaborative control strategy for platoons of autonomous vehicles in the presence of message falsification attacks. , 2017, , .		17
67	Entropy-Based Reduction of Traffic Data. IEEE Communications Letters, 2007, 11, 191-193.	4.1	16
68	Don't trust traceroute (completely). , 2013, , .		16
69	On Network Throughput Variability in Microsoft Azure Cloud. , 2015, , .		16
70	Performance evaluation of an open distributed platform for realistic traffic generation. Performance Evaluation, 2005, 60, 359-392.	1.2	15
71	A quality of experience handover system for heterogeneous multimedia wireless networks. , 2013, , .		15
72	Monitoring Internet Censorship with UBICA. Lecture Notes in Computer Science, 2015, , 143-157.	1.3	15

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73	Traffic Classification through Joint Distributions of Packet-Level Statistics. , 2011, , .		14
74	Speeding-Up DPI Traffic Classification with Chaining. , 2018, , .		14
75	Experimental Analysis of Heterogeneous Wireless Networks. Lecture Notes in Computer Science, 2004, , 153-164.	1.3	13
76	High Performance Internet Traffic Generators. Journal of Supercomputing, 2006, 35, 5-26.	3.6	13
77	Quantifying and mitigating IGMP filtering in topology discovery. , 2012, , .		13
78	Employing Unmanned Aerial Vehicles for Improving Handoff Using Cooperative Game Theory. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 776-794.	4.7	13
79	Discovering Topologies at Router Level: Part II. , 2007, , .		12
80	An efficient partial coverage algorithm for wireless sensor networks. , 2016, , .		12
81	A customer service assurance platform for mobile broadband networks. , 2011, 49, 101-109.		11
82	On the performance of new generation satellite broadband internet services. , 2014, 52, 202-209.		11
83	IEEE Access Special Section Editorial: The New Era of Smart Cities: Sensors, Communication Technologies, and Applications. IEEE Access, 2017, 5, 27836-27840.	4.2	11
84	QRP07-2: An HMM Approach to Internet Traffic Modeling. IEEE Global Telecommunications Conference (GLOBECOM), 2006, , .	0.0	10
85	SCTP performance evaluation over heterogeneous networks. Concurrency Computation Practice and Experience, 2007, 19, 1207-1218.	2.2	10
86	A map-based platform for smart mobility services. , 2015, , .		10
87	A Feedback-Control Approach for Resource Management in Public Clouds. , 2015, , .		10
88	SOMETIME: Software defined network-based available Bandwidth Measurement In MONROE. , 2017, , .		10
89	Wi-CR: Human Action Counting and Recognition with Wi-Fi Signals. , 2019, , .		10
90	Challenges in Second-Generation Wireless Mesh Networks. Eurasip Journal on Wireless Communications and Networking, 2008, 2008, .	2.4	9

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91	A Multi-Classification Approach for the Detection and Identification of eHealth Applications. , 2012, , .		9
92	IP packet interleaving for UDP bursty losses. Journal of Systems and Software, 2015, 109, 177-191.	4.5	9
93	Systematic performance modeling and characterization of heterogeneous IP networks. Journal of Computer and System Sciences, 2006, 72, 1134-1143.	1.2	8
94	High-speed wireless backbones: measurements from MagNets. , 2007, , .		8
95	DRAGO: Detecting, quantifying and locating hidden routers in Traceroute IP paths. , 2013, , .		8
96	A First Look at Public-Cloud Inter-Datacenter Network Performance. , 2016, , .		8
97	CloudSurf: A platform for monitoring public-cloud networks. , 2016, , .		8
98	How and how much traceroute confuses our understanding of network paths. , 2016, , .		8
99	SCTP vs. TCP Delay and Packet Loss. , 2007, , .		7
100	MC3: A cloud caching strategy for next generation virtual content distribution networks. , 2016, , .		6
101	Analyzing internet censorship in Pakistan. , 2016, , .		6
102	Human behavior sensing: challenges and approaches. Journal of Ambient Intelligence and Humanized Computing, 2020, 11, 6043-6058.	4.9	6
103	Classification of Communication and Collaboration Apps via Advanced Deep-Learning Approaches. , 2021, , .		6
104	Discovering Topologies at Router Level. Lecture Notes in Computer Science, 2005, , 118-129.	1.3	5
105	IP packet interleaving: Bridging the gap between theory and practice. , 2011, , .		5
106	Experiment-Driven Modeling of Open-Source Internet Traffic Generators. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 2529-2538.	4.7	5
107	Using a Behaviour Knowledge Space Approach for Detecting Unknown IP Traffic Flows. Lecture Notes in Computer Science, 2011, , 360-369.	1.3	5
108	Identification of Network Bricks in Heterogeneous Scenarios. Local Computer Networks (LCN), Proceedings of the IEEE Conference on, 2006, , .	0.0	4

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109	Long Horizon End-to-End Delay Forecasts: A Multi-Step-Ahead Hybrid Approach. Proceedings - International Symposium on Computers and Communications, 2007, , .	0.0	4
110	An approach to the identification of network elements composing heterogeneous end-to-end paths. Computer Networks, 2008, 52, 2975-2987.	5.1	4
111	Communications and Privacy under Surveillance. Computer, 2016, 49, 10-13.	1.1	4
112	Internet censorship in Italy: An analysis of 3G/4G networks. , 2017, , .		4
113	An experimental evaluation of the impact of heterogeneous scenarios and virtualization on the available bandwidth estimation tools. , 2017, , .		4
114	Network Testing and Analytics. IEEE Communications Magazine, 2018, 56, 170-170.	6.1	4
115	Filtering the Noise to Reveal Inter-Domain Lies. , 2019, , .		4
116	A Near Optimal Reliable Orchestration Approach for Geo-Distributed Latency-Sensitive SFCs. IEEE Transactions on Network Science and Engineering, 2020, 7, 2730-2745.	6.4	4
117	Seismic risk analysis of a data communication network. Sustainable and Resilient Infrastructure, 2022, 7, 655-672.	2.8	4
118	2nd Generation Wireless Mesh Networks: Technical, Economical and Social Challenges. , 2007, , .		3
119	DRAGO: Detecting, quantifying and locating hidden routers in Traceroute IP paths. , 2013, , .		3
120	New generation satellite broadband Internet services: Should ADSL and 3G worry?. , 2013, , .		3
121	Hic sunt NATs: Uncovering address translation with a smart traceroute. , 2017, , .		3
122	A Formal Methodology for Easing Development and Maintenance of Entity Services in Service Oriented Software-Defined Internet of Things. IEEE Internet of Things Journal, 2019, 6, 9516-9530.	8.7	3
123	DDSLA-RPL: Dynamic Decision System Based on Learning Automata in the RPL Protocol for Achieving QoS. IEEE Access, 2021, 9, 63131-63148.	4.2	3
124	High-speed backhaul networks: Myth or reality?. Computer Communications, 2008, 31, 1540-1550.	5.1	2
125	Networked Embedded Systems: A Quantitative Performance Comparison. , 2008, , .		2
126	Integration of 3G Connectivity in PlanetLab Europe. Mobile Networks and Applications, 2010, 15, 344-355.	3.3	2

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127	Open Source Platforms for Internet Monitoring and Measurement. , 2012, , .		2
128	The Greenhouse Effect Attack. , 2014, , .		2
129	Experimenting with alternative path tracing solutions. , 2015, , .		2
130	Internet Censorship in Italy: A First Look at 3G/4G Networks. Lecture Notes in Computer Science, 2016, , 737-742.	1.3	2
131	Encrypted Multitask Traffic Classification via Multimodal Deep Learning. , 2021, , .		2
132	The Art of Detecting Forwarding Detours. IEEE Transactions on Network and Service Management, 2021, 18, 3619-3632.	4.9	2
133	Mobile Network Traffic Prediction Using High Order Markov Chains Trained At Multiple Granularity. , 2021, , .		2
134	A First Look at an Automated Pipeline for NGS-Based Breast-Cancer Diagnosis: The CArDIGAN Approach. , 2016, , .		1
135	Measuring Networks Using IP Options. IEEE Network, 2017, 31, 30-36.	6.9	1
136	eMES: Easing Maintenance of Entity Services in Service Oriented Software-Defined Internet of Things. , 2019, , .		1
137	Unveiling MIMETIC: Interpreting Deep Learning Traffic Classifiers via XAI Techniques. , 2021, , .		1
138	Characterizing and Modeling Traffic of Communication and Collaboration Apps Bloomed With COVID-19 Outbreak. , 2021, , .		1
139	Experimental analysis of attacks against intradomain routing protocols. Journal of Computer Security, 2005, 13, 877-903.	0.8	0
140	Transparent Network Configuration for Internet Telephony Traffic. , 2007, , .		0
141	Detecting third-party addresses in traceroute IP paths. Computer Communication Review, 2012, 42, 109-110.	1.8	0
142	A QoS-aware network supporting an E-learning framework. , 2003, , 83-92.		0