Ali Dehghantanha

List of Publications by Citations

164 papers	4,745 citations	37 h-index	64 g-index
172 ext. papers	6,471 ext. citations	3.7 avg, IF	6.98 L-index

#	Paper	IF	Citations
164	A deep Recurrent Neural Network based approach for Internet of Things malware threat hunting. *Future Generation Computer Systems*, **2018**, 85, 88-96	7.5	195
163	A systematic literature review of blockchain cyber security. *Digital Communications and Networks*, **2020**, 6, 147-156	5.9	191
162	Robust Malware Detection for Internet of (Battlefield) Things Devices Using Deep Eigenspace Learning. *IEEE Transactions on Sustainable Computing*, **2019**, 4, 88-95	3.5	171
161	A Two-Layer Dimension Reduction and Two-Tier Classification Model for Anomaly-Based Intrusion Detection in IoT Backbone Networks. *IEEE Transactions on Emerging Topics in Computing*, **2019**, 7, 314-323	4.1	170
160	A survey on security and privacy of federated learning. *Future Generation Computer Systems*, **2021**, 115, 619-640	7.5	165
159	Machine learning aided Android malware classification. *Computers and Electrical Engineering*, **2017**, 61, 266-274	4.3	161
158	Ensemble-based multi-filter feature selection method for DDoS detection in cloud computing. *Eurasip Journal on Wireless Communications and Networking*, **2016**, 2016,	3.2	160
157	A Deep and Scalable Unsupervised Machine Learning System for Cyber-Attack Detection in Large-Scale Smart Grids. *IEEE Access*, **2019**, 7, 80778-80788	3.5	125
156	Machine learning based solutions for security of Internet of Things (IoT): A survey. *Journal of Network and Computer Applications*, **2020**, 161, 102630	7.9	124
155	Detecting crypto-ransomware in IoT networks based on energy consumption footprint. *Journal of Ambient Intelligence and Humanized Computing*, **2018**, 9, 1141-1152	3.7	123
154	Cyber intrusion detection by combined feature selection algorithm. *Journal of Information Security and Applications*, **2019**, 44, 80-88	3.5	108
153	Fuzzy pattern tree for edge malware detection and categorization in IoT. *Journal of Systems Architecture*, **2019**, 97, 1-7	5.5	99
152	Extended Kalman Filter-Based Parallel Dynamic State Estimation. *IEEE Transactions on Smart Grid*, **2015**, 6, 1539-1549	10.7	93
151	An Energy-Efficient SDN Controller Architecture for IoT Networks With Blockchain-Based Security. *IEEE Transactions on Services Computing*, **2020**, 13, 625-638	4.8	82
150	A survey on internet of things security: Requirements, challenges, and solutions. *Internet of Things (Netherlands)*, **2021**, 14, 100129	6.9	82
149	Sidechain technologies in blockchain networks: An examination and state-of-the-art review. *Journal of Network and Computer Applications*, **2020**, 149, 102471	7.9	72
148	Decentralized Authentication of Distributed Patients in Hospital Networks Using Blockchain. *IEEE Journal of Biomedical and Health Informatics*, **2020**, 24, 2146-2156	7.2	70

147	DRTHIS: Deep ransomware threat hunting and intelligence system at the fog layer. *Future Generation Computer Systems*, **2019**, 90, 94-104	7.5	64
146	Security aspects of Internet of Things aided smart grids: A bibliometric survey. *Internet of Things (Netherlands)*, **2021**, 14, 100111	6.9	64
145	A Systematic Review of the Availability and Efficacy of Countermeasures to Internal Threats in Healthcare Critical Infrastructure. *IEEE Access*, **2018**, 6, 25167-25177	3.5	60
144	An Ensemble Deep Learning-Based Cyber-Attack Detection in Industrial Control System. *IEEE Access*, **2020**, 8, 83965-83973	3.5	58
143	Digital forensics: the missing piece of the Internet of Things promise. *Computer Fraud and Security*, **2016**, 2016, 5-8	2.2	57
142	. *IEEE Transactions on Network Science and Engineering*, **2020**, 1-1	4.9	53
141	Know Abnormal, Find Evil: Frequent Pattern Mining for Ransomware Threat Hunting and Intelligence. *IEEE Transactions on Emerging Topics in Computing*, **2020**, 8, 341-351	4.1	51
140	Investigating Social Networking applications on smartphones detecting Facebook, Twitter, LinkedIn and Google+ artefacts on Android and iOS platforms. *Australian Journal of Forensic Sciences*, **2016**, 48, 469-488	1.1	49
139	An Ensemble of Deep Recurrent Neural Networks for Detecting IoT Cyber Attacks Using Network Traffic. *IEEE Internet of Things Journal*, **2020**, 7, 8852-8859	10.7	49
138	Enabling Drones in the Internet of Things With Decentralized Blockchain-Based Security. *IEEE Internet of Things Journal*, **2021**, 8, 6406-6415	10.7	49
137	M0Droid: An Android Behavioral-Based Malware Detection Model. *Journal of Information Privacy and Security*, **2015**, 11, 141-157		46
136	A cyber kill chain based taxonomy of banking Trojans for evolutionary computational intelligence. *Journal of Computational Science*, **2018**, 27, 394-409	3.4	45
135	Leveraging Machine Learning Techniques for Windows Ransomware Network Traffic Detection. *Advances in Information Security*, **2018**, 93-106	0.7	44
134	P4-to-blockchain: A secure blockchain-enabled packet parser for software defined networking. *Computers and Security*, **2020**, 88, 101629	4.9	42
133	Federated Learning-based Anomaly Detection for IoT Security Attacks. *IEEE Internet of Things Journal*, **2021**, 1-1	10.7	42
132	Forensic investigation of P2P cloud storage services and backbone for IoT networks: BitTorrent Sync as a case study. *Computers and Electrical Engineering*, **2017**, 58, 350-363	4.3	41
131	An improved two-hidden-layer extreme learning machine for malware hunting. *Computers and Security*, **2020**, 89, 101655	4.9	39
130	Windows Instant Messaging App Forensics: Facebook and Skype as Case Studies. *PLoS ONE*, **2016**, 11, e0150300	3.7	39

129	Intelligent OS X malware threat detection with code inspection. *Journal of Computer Virology and Hacking Techniques*, **2018**, 14, 213-223	3	38
128	Cryptocurrency malware hunting: A deep Recurrent Neural Network approach. *Applied Soft Computing Journal*, **2020**, 96, 106630	7.5	37
127	Smart Grid Cyber Attacks Detection Using Supervised Learning and Heuristic Feature Selection **2019**,		36
126	Cloud storage forensics: MEGA as a case study. *Australian Journal of Forensic Sciences*, **2017**, 49, 344-357	1.1	35
125	Machine Learning Aided Static Malware Analysis: A Survey and Tutorial. *Advances in Information Security*, **2018**, 7-45	0.7	35
124	An opcode-based technique for polymorphic Internet of Things malware detection. *Concurrency Computation Practice and Experience*, **2020**, 32, e5173	1.4	34
123	AI4SAFE-IoT: an AI-powered secure architecture for edge layer of Internet of things. *Neural Computing and Applications*, **2020**, 32, 16119-16133	4.8	32
122	SugarSync forensic analysis. *Australian Journal of Forensic Sciences*, **2016**, 48, 95-117	1.1	30
121	Investigating the antecedents to the adoption of SCRM technologies by start-up companies. *Telematics and Informatics*, **2017**, 34, 655-675	8.1	29
120	A Cyber-Kill-Chain based taxonomy of crypto-ransomware features. *Journal of Computer Virology and Hacking Techniques*, **2019**, 15, 277-305	3	28
119	**2012**,		28
118	BoTShark: A Deep Learning Approach for Botnet Traffic Detection. *Advances in Information Security*, **2018**, 137-153	0.7	27
117	Forensic investigation of OneDrive, Box, GoogleDrive and Dropbox applications on Android and iOS devices. *Australian Journal of Forensic Sciences*, **2016**, 48, 615-642	1.1	27
116	Threats on the horizon: understanding security threats in the era of cyber-physical systems. *Journal of Supercomputing*, **2020**, 76, 2643-2664	2.5	25
115	**2019**,		25
114	A multiview learning method for malware threat hunting: windows, IoT and android as case studies. *World Wide Web*, **2020**, 23, 1241-1260	2.9	24
113	CloudMe forensics: A case of big data forensic investigation. *Concurrency Computation Practice and Experience*, **2018**, 30, e4277	1.4	24
112	Relaxation-based anomaly detection in cyber-physical systems using ensemble kalman filter. *IET Cyber-Physical Systems: Theory and Applications*, **2020**, 5, 49-58	2.5	23

111	Cost optimization of secure routing with untrusted devices in software defined networking. *Journal of Parallel and Distributed Computing*, **2020**, 143, 36-46	4.4	22
110	A Blockchain-based Framework for Detecting Malicious Mobile Applications in App Stores **2019**,		22
109	A systematic literature review and meta-analysis on artificial intelligence in penetration testing and vulnerability assessment. *Computers and Electrical Engineering*, **2019**, 75, 175-188	4.3	21
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107	Detecting Cryptomining Malware: a Deep Learning Approach for Static and Dynamic Analysis. *Journal of Grid Computing*, **2020**, 18, 293-303	4.2	21
106	A Layered Intrusion Detection System for Critical Infrastructure Using Machine Learning **2019**,		21
105	Data Sharing and Privacy for Patient IoT Devices Using Blockchain. *Communications in Computer and Information Science*, **2019**, 334-348	0.3	20
104	A high-performance framework for a network programmable packet processor using P4 and FPGA. *Journal of Network and Computer Applications*, **2020**, 156, 102564	7.9	19
103	Leveraging Support Vector Machine for Opcode Density Based Detection of Crypto-Ransomware. *Advances in Information Security*, **2018**, 107-136	0.7	19
102	Exploit Kits: The production line of the Cybercrime economy? **2015**,		19
101	Towards secure model for SCADA systems **2012**,		19
100	Energy Efficient Decentralized Authentication in Internet of Underwater Things Using Blockchain **2019**,		19
99	Non-interactive zero knowledge proofs for the authentication of IoT devices in reduced connectivity environments. *Ad Hoc Networks*, **2019**, 95, 101988	4.8	18
98	Ubuntu One investigation: Detecting evidences on client machines **2015**, 429-446		18
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96	Forensic Investigation of Cooperative Storage Cloud Service: Symform as a Case Study. *Journal of Forensic Sciences*, **2017**, 62, 641-654	1.8	17
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94	A survey of machine learning techniques in adversarial image forensics. *Computers and Security*, **2021**, 100, 102092	4.9	17

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92	MVFCC: A Multi-View Fuzzy Consensus Clustering Model for Malware Threat Attribution. *IEEE Access*, **2020**, 8, 139188-139198	3.5	16
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86	Investigation of bypassing malware defences and malware detections **2011**,		13
85	A Hybrid Deep Generative Local Metric Learning Method for Intrusion Detection **2020**, 343-357		13
84	A Multikernel and Metaheuristic Feature Selection Approach for IoT Malware Threat Hunting in the Edge Layer. *IEEE Internet of Things Journal*, **2021**, 8, 4540-4547	10.7	13
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82	A Multilabel Fuzzy Relevance Clustering System for Malware Attack Attribution in the Edge Layer of Cyber-Physical Networks. *ACM Transactions on Cyber-Physical Systems*, **2020**, 4, 1-22	2.3	12
81	Anomaly Detection in Cyber-Physical Systems Using Machine Learning **2020**, 219-235		12
80	Applications of Big Data Analytics and Machine Learning in the Internet of Things **2020**, 77-108		12
79	A kangaroo-based intrusion detection system on software-defined networks. *Computer Networks*, **2021**, 184, 107688	5.4	12
78	Active Spectral Botnet Detection Based on Eigenvalue Weighting **2020**, 385-397		10
77	Privacy and Security in Smart and Precision Farming: A Bibliometric Analysis **2020**, 305-318		9
76	Generative adversarial network to detect unseen Internet of Things malware. *Ad Hoc Networks*, **2021**, 122, 102591	4.8	9

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73	A Model for Android and iOS Applications Risk Calculation: CVSS Analysis and Enhancement Using Case-Control Studies. *Advances in Information Security*, **2018**, 219-237	0.7	8
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70	Learning Based Anomaly Detection in Critical Cyber-Physical Systems **2020**, 107-130		8
69	Real-time stability assessment in smart cyber-physical grids: a deep learning approach. *IET Smart Grid*, **2020**, 3, 454-461	2.7	8
68	Application of Machine Learning Algorithms for Android Malware Detection **2018**,		8
67	Mobile Forensics: A Bibliometric Analysis. *Advances in Information Security*, **2018**, 297-310	0.7	8
66	An Ensemble Deep Convolutional Neural Network Model for Electricity Theft Detection in Smart Grids **2020**,		7
65	Enhancing Network Security Via Machine Learning: Opportunities and Challenges **2020**, 165-189		7
64	An analysis of anti-forensic capabilities of B-tree file system (Btrfs). *Australian Journal of Forensic Sciences*, **2020**, 52, 371-386	1.1	7
63	A Review on Security of Smart Farming and Precision Agriculture: Security Aspects, Attacks, Threats and Countermeasures. *Applied Sciences (Switzerland)*, **2021**, 11, 7518	2.6	7
62	A Bibliometric Analysis of Authentication and Access Control in IoT Devices **2019**, 25-51		6
61	Big Data and Privacy: Challenges and Opportunities **2020**, 1-5		6
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56	Internet of Things Camera Identification Algorithm Based on Sensor Pattern Noise Using Color Filter Array and Wavelet Transform **2019**, 211-223		5
55	A Cyber Kill Chain Based Analysis of Remote Access Trojans **2019**, 273-299		5
54	Forensics Investigation of OpenFlow-Based SDN Platforms. *Advances in Information Security*, **2018**, 281-296	3.7	5
53	VoIP evidence model: A new forensic method for investigating VoIP malicious attacks **2012**,		5
52	An Empirical Evaluation of AI Deep Explainable Tools **2020**,		5
51	A Comparison of State-of-the-Art Machine Learning Models for OpCode-Based IoT Malware Detection **2020**, 109-120		5
50	Artificial Intelligence and Security of Industrial Control Systems **2020**, 121-164		5
49	A Comparison Between Different Machine Learning Models for IoT Malware Detection **2020**, 195-202		5
48	A Closer Look at Syncany Windows and Ubuntu Clients' Residual Artefacts. *Lecture Notes in Computer Science*, **2016**, 342-357	0.9	5
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46	Private Cloud Storage Forensics: Seafile as a Case Study **2019**, 73-127		4
45	UPM: User-Centered Privacy Model in Pervasive Computing Systems **2009**,		4
44	CyberPDF **2018**,		4
43	Malware Elimination Impact on Dynamic Analysis: An Experimental Machine Learning Approach **2020**, 359-370		4
42	A Privacy Protection Key Agreement Protocol Based on ECC for Smart Grid **2020**, 63-76		4
41	**2019**,		4
40	A Bibliometric Analysis of Botnet Detection Techniques **2019**, 345-365		3

39	Security in Online Games: Current Implementations and Challenges **2019**, 367-384		3
38	An approach for forensic investigation in Firefox OS **2014**,		3
37	Mobile forensic data acquisition in Firefox OS **2014**,		3
36	Big-Data and Cyber-Physical Systems in Healthcare: Challenges and Opportunities **2020**, 255-283		3
35	A Survey on Application of Big Data in Fin Tech Banking Security and Privacy **2020**, 319-342		3
34	RAT Hunter: Building Robust Models for Detecting Remote Access Trojans Based on Optimum Hybrid Features **2020**, 371-383		3
33	Blockchain in Cybersecurity Realm: An Overview. *Advances in Information Security*, **2020**, 1-5	0.7	3
32	Blockchain Applications in Power Systems: A Bibliometric Analysis. *Advances in Information Security*, **2020**, 129-145	0.7	3
31	A Survey on Digital Forensics Trends. *International Journal of Cyber-Security and Digital Forensics*, **2014**, 3, 209-234	1.6	3
30	**2018**,		3
29	Big Data Forensics: Hadoop Distributed File Systems as a Case Study **2019**, 179-210		2
28	Evaluation and Application of Two Fuzzing Approaches for Security Testing of IoT Applications **2019**, 301-327		2
27	Federated IoT attack detection using decentralized edge data. *Machine Learning With Applications*, **2022**, 8, 100263	6.5	2
26	Immutable and Secure IP Address Protection Using Blockchain. *Advances in Information Security*, **2020**, 233-246	0.7	2
25	A Self-tuning Cyber-Attacks Location Identification Approach for Industrial Internet of Things. *IEEE Transactions on Industrial Informatics*, **2021**, 1-1	11.9	2
24	Analysis of APT Actors Targeting IoT and Big Data Systems: Shell_Crew, NetTraveler, ProjectSauron, CopyKittens, Volatile Cedar and Transparent Tribe as a Case Study **2019**, 257-272		2
23	Secure Blockchain-Based Traffic Load Balancing Using Edge Computing and Reinforcement Learning. *Advances in Information Security*, **2020**, 99-128	0.7	2
22	Application of Machine Learning in State Estimation of Smart Cyber-Physical Grid **2020**, 169-194		2

21	Employing Composite Demand Response Model in Microgrid Energy Management **2019**,		1
20	Towards data centric mobile security **2011**,		1
19	A Bibliometric Analysis on the Application of Deep Learning in Cybersecurity **2020**, 203-221		1
18	AI and Security of Critical Infrastructure **2020**, 7-36		1
17	Big Data Application for Security of Renewable Energy Resources **2020**, 237-254		1
16	Bibliometric Analysis on the Rise of Cloud Security **2019**, 329-344		1
15	Distributed Filesystem Forensics: Ceph as a Case Study **2019**, 129-151		1
14	Blockchain Applications in the Industrial Internet of Things **2021**, 41-76		1
13	Deep Representation Learning for Cyber-Attack Detection in Industrial IoT **2021**, 139-162		1
12	IoT Privacy, Security and Forensics Challenges: An Unmanned Aerial Vehicle (UAV) Case Study **2022**, 7-39		0
11	A Recurrent Attention Model for Cyber Attack Classification **2021**, 237-250		0
10	A Snapshot Ensemble Deep Neural Network Model for Attack Detection in Industrial Internet of Things **2021**, 181-194		0
9	Application of Deep Learning on IoT-Enabled Smart Grid Monitoring **2021**, 77-103		0
8	An efficient packet parser architecture for software-defined 5G networks. *Physical Communication*, **2022**, 53, 101677	2.2	0
7	Privacy Preserving Abnormality Detection: A Deep Learning Approach **2020**, 285-303		
6	Big Data Analytics and Forensics: An Overview **2022**, 1-5		
5	Forensic Investigation of Cross Platform Massively Multiplayer Online Games: Minecraft as a Case Study **2019**, 153-177		
4	Editorial for the Special Issue on Sustainable Cyber Forensics and Threat Intelligence. *IEEE Transactions on Sustainable Computing*, **2021**, 6, 182-183	3.5	

3	Lower Bounds on Bandwidth Requirements of Regenerating Code Parameter Scaling in Distributed Storage Systems. *IEEE Communications Letters*, **2021**, 25, 1477-1481	3.8
2	Cyber defence triage for multimedia data intelligence: Hellsing, Desert Falcons and Lotus Blossom APT campaigns as case studies. *International Journal of Multimedia Intelligence and Security*, **2019**, 3, 221	0.4
1	Artificial Intelligence for Threat Detection and Analysis in Industrial IoT: Applications and Challenges **2021**, 1-6	