Ayse Nur Zincir-Heywood

List of Publications by Year
in descending order

64 papers	866 citations	759055 12 h-index	610775 24 g-index
68 all docs	68 docs citations	68 times ranked	533 citing authors

#	Article	IF	Citations
1	Training Genetic Programming on Half a Million Patterns: An Example From Anomaly Detection. IEEE Transactions on Evolutionary Computation, 2005, 9, 225-239.	7.5	122
2	Can encrypted traffic be identified without port numbers, IP addresses and payload inspection?. Computer Networks, 2011, 55, 1326-1350.	3.2	110
3	Analyzing Data Granularity Levels for Insider Threat Detection Using Machine Learning. IEEE Transactions on Network and Service Management, 2020, 17, 30-44.	3.2	75
4	Narrative text classification for automatic key phrase extraction in web document corpora. , 2005, , .		45
5	Anomaly Detection for Insider Threats Using Unsupervised Ensembles. IEEE Transactions on Network and Service Management, 2021, 18, 1152-1164.	3.2	42
6	On botnet detection with genetic programming under streaming data label budgets and class imbalance. Swarm and Evolutionary Computation, 2018, 39, 123-140.	4.5	36
7	Identification of VoIP encrypted traffic using a machine learning approach. Journal of King Saud University - Computer and Information Sciences, 2015, 27, 77-92.	2.7	33
8	Exploring Feature Normalization and Temporal Information for Machine Learning Based Insider Threat Detection. , 2019, , .		28
9	On evolving buffer overflow attacks using genetic programming. , 2006, , .		20
10	Generalization of signatures for SSH encrypted traffic identification. , 2009, , .		19
11	Exploring anomalous behaviour detection and classification for insider threat identification. International Journal of Network Management, 2021, 31, e2109.	1.4	18
12	Can a good offense be a good defense? Vulnerability testing of anomaly detectors through an artificial arms race. Applied Soft Computing Journal, 2011, 11, 4366-4383.	4.1	16
13	How Robust Can a Machine Learning Approach Be for Classifying Encrypted VoIP?. Journal of Network and Systems Management, 2015, 23, 830-869.	3.3	15
14	A Frontier: Dependable, Reliable and Secure Machine Learning for Network/System Management. Journal of Network and Systems Management, 2020, 28, 827-849.	3.3	15
15	Adding more intelligence to the network routing problem: AntNet and Ga-agents. Applied Soft Computing Journal, 2006, 6, 244-257.	4.1	13
16	A Preliminary Investigation of Skype Traffic Classification Using a Minimalist Feature Set. , 2008, , .		13
17	Evolutionary computation as an artificial attacker: generating evasion attacks for detector vulnerability testing. Evolutionary Intelligence, 2011, 4, 243-266.	2.3	13
18	Analysis of Three Intrusion Detection System Benchmark Datasets Using Machine Learning Algorithms. Lecture Notes in Computer Science, 2005, , 362-367.	1.0	12

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19	Bottom-up evolutionary subspace clustering. , 2010, , .		11
20	An Artificial Arms Race: Could it Improve Mobile Malware Detectors?. , 2018, , .		11
21	Exploring Adversarial Properties of Insider Threat Detection. , 2020, , .		11
22	GP under streaming data constraints. , 2012, , .		10
23	Botnet behaviour analysis: How would a data analytics€based system with minimum a priori information perform?. International Journal of Network Management, 2017, 27, e1977.	1.4	10
24	Multi-document summarization of scientific corpora. , 2011, , .		9
25	Speeding up the Self-Organizing Feature Map Using Dynamic Subset Selection. Neural Processing Letters, 2005, 22, 17-32.	2.0	8
26	Exploring NAT Detection and Host Identification Using Machine Learning. , 2019, , .		8
27	Guest Editorial: Special Section on Advances in Big Data Analytics for Management. IEEE Transactions on Network and Service Management, 2018, 15, 10-12.	3.2	7
28	Network Flow Entropy for Identifying Malicious Behaviours in DNS Tunnels. , 2021, , .		7
29	Summarizing Web Sites Automatically. Lecture Notes in Computer Science, 2003, , 283-296.	1.0	7
30	Evolving TCP/IP packets: A case study of port scans. , 2009, , .		6
31	Initiating a Moving Target Network Defense with a Real-time Neuro-evolutionary Detector. , 2016, , .		6
32	Return-oriented programme evolution with ROPER. , 2017, , .		6
33	Guest Editorial: Special Issue on Novel Techniques in Big Data Analytics for Management. IEEE Transactions on Network and Service Management, 2019, 16, 797-799.	3.2	6
34	User identification via neural network based language models. International Journal of Network Management, 2019, 29, e2049.	1.4	6
35	Log Abstraction for Information Security: Heuristics and Reproducibility. , 2021, , .		5
36	BoostGuard: Interpretable Misbehavior Detection in Vehicular Communication Networks. , 2022, , .		5

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37	Digital library query clearing using clustering and fuzzy decision-making. Information Processing and Management, 2000, 36, 571-583.	5.4	4
38	Robust learning intrusion detection for attacks on wireless networks. Intelligent Data Analysis, 2011, 15, 801-823.	0.4	4
39	Big Data in Network Anomaly Detection. , 2018, , 1-9.		4
40	Guest Editorial: Special Section on Data Analytics and Machine Learning for Network and Service Managementâ€"Part I. IEEE Transactions on Network and Service Management, 2020, 17, 1971-1974.	3.2	4
41	Training regime influences to semi-supervised learning for insider threat detection. , 2021, , .		4
42	Using Code Bloat to Obfuscate Evolved Network Traffic. Lecture Notes in Computer Science, 2010, , 101-110.	1.0	4
43	Guest Editorial: Special Section on Embracing Artificial Intelligence for Network and Service Management. IEEE Transactions on Network and Service Management, 2021, 18, 3936-3941.	3.2	4
44	NetPal. , 2008, , .		3
45	On the Impact of Class Imbalance in GP Streaming Classification with Label Budgets. Lecture Notes in Computer Science, 2016, , 35-50.	1.0	3
46	Guest Editorial: Special Issue on Data Analytics and Machine Learning for Network and Service Managementâ€"Part II. IEEE Transactions on Network and Service Management, 2021, 18, 775-779.	3.2	3
47	Object-orientated design of digital library platforms for multiagent environments. IEEE Transactions on Knowledge and Data Engineering, 2002, 14, 281-295.	4.0	2
48	Post-Supervised Template Induction for Information Extraction from Lists and Tables in Dynamic Web Sources. Journal of Intelligent Information Systems, 2005, 25, 69-93.	2.8	2
49	Adaptabilty of a GP Based IDS on Wireless Networks. , 2008, , .		2
50	Optimizing anomaly detector deployment under evolutionary black-box vulnerability testing. , 2009, , .		2
51	Learning From Evolving Network Data for Dependable Botnet Detection. , 2019, , .		2
52	Exploring syntactical features for anomaly detection in application logs. IT - Information Technology, 2022, 64, 15-27.	0.6	2
53	Incorporating Temporal Information for Document Classification. , 2007, , .		1
54	Label free change detection on streaming data with cooperative multi-objective genetic programming. , 2013, , .		1

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55	Benchmarking Stream Clustering for Churn Detection in Dynamic Networks. Lecture Notes in Computer Science, 2015, , 284-298.	1.0	1
56	Big data analytics for network and service management. International Journal of Network Management, 2017, 27, e1974.	1.4	1
57	Analyzing COVID-19 Tweets using Health Behaviour Theories and Machine Learning. , 2021, , .		1
58	Exploring Tunneling Behaviours in Malicious Domains With Self-Organizing Maps. , 2020, , .		1
59	From search engines' view point: Web pages designed in Turkey. Information Technology for Development, 2000, 9, 13-23.	2.7	0
60	A heuristic approach to network optimised mapping of a distributed resource discovery architecture. International Journal of Computer Applications in Technology, 2004, 19, 43.	0.3	0
61	Women@GECCO 2016 Chairs' Welcome. , 2016, , .		0
62	Evolutionary computation in network management and security. , 2017, , .		0
63	CNSM 2019 special issue: Embracing the new wave of artificial intelligence. International Journal of Network Management, 2021, 31, e2149.	1.4	0
64	Post-supervised Template Induction for Dynamic Web Sources. Lecture Notes in Computer Science, 2003, , 268-282.	1.0	0