Vinay Chamola, Senior Member, Ieee

List of Publications by Year in Descending Order

107	2,830	24	50
papers	citations	h-index	g-index
122	4,225	5.7	6.6
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
107	DroneSegNet: AI-driven Robust Aerial Semantic Segmentation for IoT Applications. *IEEE Transactions on Vehicular Technology*, **2022**, 1-1	6.8	1
106	A machine learning and blockchain based secure and cost-effective framework for minor medical consultations. *Sustainable Computing: Informatics and Systems*, **2022**, 35, 100651	3	3
105	Decentralized Renewable Resource Redistribution and Optimization for Beyond 5G Small Cell Base Stations: A Machine Learning Approach. *IEEE Systems Journal*, **2022**, 1-12	4.3	
104	A Game Theoretic Analysis for Power Management and Cost Optimization of Green Base Stations in 5G and Beyond Communication Networks. *IEEE Transactions on Network and Service Management*, **2022**, 1-1	4.8	0
103	NovelADS: A Novel Anomaly Detection System for Intra-Vehicular Networks. *IEEE Transactions on Intelligent Transportation Systems*, **2022**, 1-11	6.1	3
102	A review on Virtual Reality and Augmented Reality use-cases of Brain Computer Interface based applications for smart cities. *Microprocessors and Microsystems*, **2022**, 88, 104392	2.4	12
101	A Comprehensive Survey on the Applications of Blockchain for Securing Vehicular Networks. *IEEE Communications Surveys and Tutorials*, **2022**, 1-1	37.1	9
100	Correction to ReViewNet: A Fast and Resource Optimized Network for Enabling Safe Autonomous Driving in Hazy Weather Conditions *IEEE Transactions on Intelligent Transportation Systems*, **2022**, 23, 2888-2888	6.1	0
99	Artificial intelligence-assisted blockchain-based framework for smart and secure EMR management.. *Neural Computing and Applications*, **2022**, 1-11	4.8	2
98	Energy and latency aware mobile task assignment for green cloudlets. *Simulation Modelling Practice and Theory*, **2022**, 102531	3.9	0
97	Enabling Cost-Effective and Secure Minor Medical Teleconsultation Using Artificial Intelligence and Blockchain. *IEEE Internet of Things Magazine*, **2022**, 5, 80-84	3.5	1
96	SHOTS: Scalable Secure Hardware Based Authentication-Attestation Protocol Using Optimal Trajectory in UAV Swarms. *IEEE Transactions on Vehicular Technology*, **2022**, 1-1	6.8	2
95	5G network slice for digital real-time healthcare system powered by network data analytics **2021**, 1, 14-14		4
94	A Blockchain and Edge-Computing-Based Secure Framework for Government Tender Allocation. *IEEE Internet of Things Journal*, **2021**, 8, 2409-2418	10.7	8
93	Police FIR Registration and Tracking Using Consortium Blockchain. *Algorithms for Intelligent Systems*, **2021**, 785-794	0.5	0
92	UAV SECaaS: Game-Theoretic Formulation for Security as a Service in UAV Swarms. *IEEE Systems Journal*, **2021**, 1-10	4.3	1
91	A Blockchain and Machine Learning based Framework for Efficient Health Insurance Management **2021**,		2

90	Toward Safer Vehicular Transit: Implementing Deep Learning on Single Channel EEG Systems for Microsleep Detection. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-10	6.1	0
89	Drone-MAP: A Novel Authentication Scheme for Drone-Assisted 5G Networks **2021**,		5
88	Securing the Internet of Vehicles: A Deep Learning-Based Classification Framework. *IEEE Networking Letters*, **2021**, 3, 94-97	2.8	6
87	Artificial Intelligence (AI)-Empowered Intrusion Detection Architecture for the Internet of Vehicles. *IEEE Wireless Communications*, **2021**, 28, 144-149	13.4	12
86	Deep Neural Networks for Securing IoT Enabled Vehicular Ad-Hoc Networks **2021**,		3
85	IoMT and DNN-Enabled Drone-Assisted Covid-19 Screening and Detection Framework for Rural Areas. *IEEE Internet of Things Magazine*, **2021**, 4, 4-9	3.5	11
84	Next generation stock exchange: Recurrent neural learning model for distributed ledger transactions. *Computer Networks*, **2021**, 193, 107998	5.4	0
83	Traffic Jam Probability Estimation Based on Blockchain and Deep Neural Networks. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 22, 3919-3928	6.1	22
82	Security issues in implantable medical devices: Fact or fiction?. *Sustainable Cities and Society*, **2021**, 66, 102552	10.1	16
81	A Survey on Supply Chain Security: Application Areas, Security Threats, and Solution Architectures. *IEEE Internet of Things Journal*, **2021**, 8, 6222-6246	10.7	30
80	A Comprehensive Review of Unmanned Aerial Vehicle Attacks and Neutralization Techniques. *Ad Hoc Networks*, **2021**, 111, 102324	4.8	49
79	Network Slicing for 5G with UE State Based Allocation and Blockchain Approach. *IEEE Network*, **2021**, 35, 184-190	11.4	4
78	DCNN-GA: A Deep Neural Net Architecture for Navigation of UAV in Indoor Environment. *IEEE Internet of Things Journal*, **2021**, 8, 4448-4460	10.7	14
77	HARCI: A Two-Way Authentication Protocol for Three Entity Healthcare IoT Networks. *IEEE Journal on Selected Areas in Communications*, **2021**, 39, 361-369	14.2	23
76	ReViewNet: A Fast and Resource Optimized Network for Enabling Safe Autonomous Driving in Hazy Weather Conditions. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 22, 4256-4266	6.1	14
75	A Survey of Energy and Spectrum Harvesting Technologies and Protocols for Next Generation Wireless Networks. *IEEE Access*, **2021**, 9, 1737-1769	3.5	4
74	Advancing Remote Healthcare using Humanoid and Affective Systems. *IEEE Sensors Journal*, **2021**, 1-1	4	10
73	Industrial Internet of Things (IIoT) Applications of Edge and Fog Computing: A Review and Future Directions. *Advances in Information Security*, **2021**, 293-325	0.7	11

72	DeepADV: A Deep Neural Network Framework for Anomaly Detection in VANETs. *IEEE Transactions on Vehicular Technology*, **2021**, 1-1	6.8	4
71	Fast, Reliable, and Secure Drone Communication: A Comprehensive Survey. *IEEE Communications Surveys and Tutorials*, **2021**, 1-1	37.1	17
70	Machine Learning Assisted Security and Privacy Provisioning for Edge Computing: A Survey. *IEEE Internet of Things Journal*, **2021**, 1-1	10.7	10
69	Framework for determining the suitability of blockchain: Criteria and issues to consider. *Transactions on Emerging Telecommunications Technologies*, **2021**, 32, e4334	1.9	3
68	Smart water conservation through a machine learning and blockchain-enabled decentralized edge computing network. *Applied Soft Computing Journal*, **2021**, 106, 107274	7.5	6
67	Battery lifetime estimation for energy efficient telecommunication networks in smart cities. *Sustainable Energy Technologies and Assessments*, **2021**, 46, 101205	4.7	2
66	A blockchain and deep neural networks-based secure framework for enhanced crop protection. *Ad Hoc Networks*, **2021**, 119, 102537	4.8	5
65	AgriSegNet: Deep Aerial Semantic Segmentation Framework for IoT-Assisted Precision Agriculture. *IEEE Sensors Journal*, **2021**, 21, 17581-17590	4	22
64	Information security in the post quantum era for 5G and beyond networks: Threats to existing cryptography, and post-quantum cryptography. *Computer Communications*, **2021**, 176, 99-118	5.1	7
63	ISDNet: AI-enabled Instance Segmentation of Aerial Scenes for Smart Cities. *ACM Transactions on Internet Technology*, **2021**, 21, 1-18	3.8	3
62	A survey on the role of Internet of Things for adopting and promoting Agriculture 4.0. *Journal of Network and Computer Applications*, **2021**, 187, 103107	7.9	23
61	Privacy-Preserving and Incentivized Contact Tracing for COVID-19 Using Blockchain. *IEEE Internet of Things Magazine*, **2021**, 4, 72-79	3.5	3
60	Optimal Spectral Resource Allocation and Pricing for 5G and Beyond: A Game Theoretic Approach. *IEEE Networking Letters*, **2021**, 3, 119-123	2.8	0
59	Edge Computing and Deep Learning Enabled Secure Multitier Network for Internet of Vehicles. *IEEE Internet of Things Journal*, **2021**, 8, 14787-14796	10.7	5
58	Role of machine learning and deep learning in securing 5G-driven industrial IoT applications. *Ad Hoc Networks*, **2021**, 123, 102685	4.8	14
57	Machine Learning on FPGA for Robust Si3N4-gate ISFET pH Sensor in Industrial IoT Applications. *IEEE Transactions on Industry Applications*, **2021**, 1-1	4.3	0
56	A Review on the Role of Machine Learning in Enabling IoT Based Healthcare Applications. *IEEE Access*, **2021**, 9, 38859-38890	3.5	31
55	FPGA for 5G: Re-configurable Hardware for Next Generation Communication. *IEEE Wireless Communications*, **2020**, 27, 140-147	13.4	9

54	A Comprehensive Review of the COVID-19 Pandemic and the Role of IoT, Drones, AI, Blockchain, and 5G in Managing its Impact. *IEEE Access*, **2020**, 8, 90225-90265	3.5	451
53	A Distributed Framework for Energy Trading Between UAVs and Charging Stations for Critical Applications. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 5391-5402	6.8	42
52	Secure Lending: Blockchain and Prospect Theory-Based Decentralized Credit Scoring Model. *IEEE Transactions on Network Science and Engineering*, **2020**, 7, 2566-2575	4.9	8
51	A Parking Slot Allocation Framework Based on Virtual Voting and Adaptive Pricing Algorithm. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 5945-5957	6.8	22
50	Energy and Latency Aware Resource Management for Solar Powered Cellular Networks. *IEEE Network*, **2020**, 34, 246-253	11.4	3
49	Brain-Computer Interface-Based Humanoid Control: A Review. *Sensors*, **2020**, 20,	3.8	31
48	Notice of Retraction: Electromagnetic Radiation Due to Cellular, Wi-Fi and Bluetooth Technologies: How Safe Are We?. *IEEE Access*, **2020**, 8, 42980-43000	3.5	6
47	RAMA: Real-Time Automobile Mutual Authentication Protocol Using PUF **2020**,		11
46	Applications of blockchain in unmanned aerial vehicles: A review. *Vehicular Communications*, **2020**, 23, 100249	5.7	73
45	Lightweight Mutual Authentication Protocol for V2G Using Physical Unclonable Function. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 7234-7246	6.8	46
44	Blockchain for Internet of Energy management: Review, solutions, and challenges. *Computer Communications*, **2020**, 151, 395-418	5.1	111
43	A mobile data offloading framework based on a combination of blockchain and virtual voting. *Software - Practice and Experience*, **2020**,	2.5	19
42	A Blockchain-Based Framework for Lightweight Data Sharing and Energy Trading in V2G Network. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 5799-5812	6.8	83
41	DAGIoV: A Framework for Vehicle to Vehicle Communication Using Directed Acyclic Graph and Game Theory. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 4182-4191	6.8	36
40	Consumer IoT: Security Vulnerability Case Studies and Solutions. *IEEE Consumer Electronics Magazine*, **2020**, 9, 17-25	3.2	107
39	Blockchain for 5G: A Prelude to Future Telecommunication. *IEEE Network*, **2020**, 34, 106-113	11.4	30
38	Industrial Control Systems: Cyberattack trends and countermeasures. *Computer Communications*, **2020**, 155, 1-8	5.1	41
37	Disaster and Pandemic Management Using Machine Learning: A Survey. *IEEE Internet of Things Journal*, **2020**, 1-1	10.7	16

36	SecAuthUAV: A Novel Authentication Scheme for UAV-Ground Station and UAV-UAV Communication. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 15068-15077	6.8	48
35	A blockchain-based framework for energy trading between solar powered base stations and grid **2020**,		2
34	A Lightweight Authentication and Attestation Scheme for In-Transit Vehicles in IoV Scenario. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 14188-14197	6.8	14
33	PARTH: A two-stage lightweight mutual authentication protocol for UAV surveillance networks. *Computer Communications*, **2020**, 160, 81-90	5.1	36
32	BitFund: A blockchain-based crowd funding platform for future smart and connected nation. *Sustainable Cities and Society*, **2020**, 60, 102145	10.1	16
31	Forthcoming applications of quantum computing: peeking into the future. *IET Quantum Communication*, **2020**, 1, 35-41	3.2	4
30	Present landscape of quantum computing. *IET Quantum Communication*, **2020**, 1, 42-48	3.2	8
29	CB-CAS: Certificate-Based Efficient Signature Scheme With Compact Aggregation for Industrial Internet of Things Environment. *IEEE Internet of Things Journal*, **2020**, 7, 2563-2572	10.7	21
28	A Blockchain based Framework for Secure Data Offloading in Tactile Internet Environment **2020**,		1
27	Deep3DSCan: Deep residual network and morphological descriptor based framework forlung cancer classification and 3D segmentation. *IET Image Processing*, **2020**, 14, 1240-1247	1.7	23
26	An IoT and Edge Computing Based Framework for Charge Scheduling and EV Selection in V2G Systems. *IEEE Transactions on Vehicular Technology*, **2020**, 69, 10569-10580	6.8	13
25	A Framework for Secure Vehicular Network using Advanced Blockchain **2020**,		8
24	Computation Offloading for Vehicular Environments: A Survey. *IEEE Access*, **2020**, 8, 198214-198243	3.5	21
23	Scheduling drone charging for multi-drone network based on consensus time-stamp and game theory. *Computer Communications*, **2020**, 149, 51-61	5.1	55
22	An optimal delay aware task assignment scheme for wireless SDN networked edge cloudlets. *Future Generation Computer Systems*, **2020**, 102, 862-875	7.5	26
21	A Survey on IoT Security: Application Areas, Security Threats, and Solution Architectures. *IEEE Access*, **2019**, 7, 82721-82743	3.5	414
20	E-SATS: An Efficient and Simple Time Synchronization Protocol for Cluster- Based Wireless Sensor Networks. *IEEE Sensors Journal*, **2019**, 19, 10144-10156	4	9
19	A testbed validated simple time synchronization protocol for clustered wireless sensor networks for IoT. *Journal of Intelligent and Fuzzy Systems*, **2019**, 36, 4531-4543	1.6	1

18	BlockCom: A Blockchain Based Commerce Model for Smart Communities using Auction Mechanism **2019**,		22
17	Blockchain in Smart Grids: A Review on Different Use Cases. *Sensors*, **2019**, 19,	3.8	101
16	Smart Stock Exchange Market: A Secure Predictive Decentralized Model **2019**,		14
15	Blockchain Applications for Industry 4.0 and Industrial IoT: A Review. *IEEE Access*, **2019**, 7, 176935-176951	3.5	141
14	Green Energy and Delay Aware Downlink Power Control and User Association for Off-Grid Solar-Powered Base Stations. *IEEE Systems Journal*, **2018**, 12, 2622-2633	4.3	26
13	**2017**,		19
12	Delay Aware Resource Management for Grid Energy Savings in Green Cellular Base Stations With Hybrid Power Supplies. *IEEE Transactions on Communications*, **2017**, 65, 1092-1104	6.9	28
11	Power Outage Estimation and Resource Dimensioning for Solar Powered Cellular Base Stations. *IEEE Transactions on Communications*, **2016**, 64, 5278-5289	6.9	19
10	An Energy and Delay Aware Downlink Power Control Strategy for Solar Powered Base Stations. *IEEE Communications Letters*, **2016**, 20, 954-957	3.8	13
9	Hardware validated efficient and simple Time Synchronization protocol for clustered WSN **2016**,		1
8	Solar powered cellular base stations: current scenario, issues and proposed solutions **2016**, 54, 108-114		74
7	A Multistate Markov Model for Dimensioning Solar Powered Cellular Base Stations. *IEEE Transactions on Sustainable Energy*, **2015**, 6, 1650-1652	8.2	14
6	Outage estimation for solar powered cellular base stations **2015**,		11
5	Resource provisioning and dimensioning for solar powered cellular base stations **2014**,		17
4	LWCNN: a lightweight convolutional neural network for agricultural crop protection. *Multimedia Tools and Applications*,1	2.5	0
3	AI-enabled remote monitoring of vital signs for COVID-19: methods, prospects and challenges. *Computing (Vienna/New York)*,1	2.2	15
2	A survey on computation resource allocation in IoT enabled vehicular edge computing. *Complex & Intelligent Systems*,1	7.1	1
1	Security in IoT-enabled smart agriculture: architecture, security solutions and challenges. *Cluster Computing*,1	2.1	6