

# Amiya Nayak

## List of Publications by Year in descending order

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Version: 2024-02-01

121  
papers

2,646  
citations

201575

27  
h-index

206029

48  
g-index

124  
all docs

124  
docs citations

124  
times ranked

2672  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | DL-IDS: a deep learning-based intrusion detection framework for securing IoT. Transactions on Emerging Telecommunications Technologies, 2022, 33, e3803.  | 2.6 | 109       |
| 2  | A Collaborative Caching-Transmission Method for Heterogeneous Video Services in Cache-Enabled Terahertz Heterogeneous Networks. IEEE Transactions on Vehicular Technology, 2022, 71, 3187-3200. | 3.9 | 7         |
| 3  | A Spam Transformer Model for SMS Spam Detection. IEEE Access, 2021, 9, 80253-80263.   | 2.6 | 38        |
| 4  | RTEAM: Risk-Based Trust Evaluation Advanced Model for VANETs. IEEE Access, 2021, 9, 117772-117783.  | 2.6 | 10        |
| 5  | AS-IDS: Anomaly and Signature Based IDS for the Internet of Things. Journal of Network and Systems Management, 2021, 29, 1.   | 3.3 | 64        |
| 6  | Linking handover delay to load balancing in SDN-based heterogeneous networks. Computer Communications, 2021, 173, 170-182.  | 3.1 | 9         |
| 7  | Efficient Authentication Protocol for Continuous Monitoring in Medical Sensor Networks. IEEE Open Journal of the Computer Society, 2021, 2, 130-138.  | 5.2 | 9         |
| 8  | A Fog-based Reputation Evaluation Model for VANETs. , 2021, , .   |     | 3         |
| 9  | Signature-Over-The-Air with Transfer Learning IDS for Intelligent Connected Vehicles (ICV). , 2021, , .   |     | 7         |
| 10 | Federated Transfer Learning-Based IDS for the Internet of Medical Things (IoMT). , 2021, , .  |     | 16        |
| 11 | A GNN-based Approach to Optimize Cache Hit Ratio in NDN Networks. , 2021, , .   |     | 7         |
| 12 | Fog Integration with Optical Access Networks from an Energy Efficiency Perspective. , 2020, , .   |     | 2         |
| 13 | Periodic Time Series Data Analysis by Deep Learning Methodology. IEEE Access, 2020, 8, 223078-223088.   | 2.6 | 1         |
| 14 | An Intelligent Traffic Classification in SDN-IoT: A Machine Learning Approach. , 2020, , .  |     | 13        |
| 15 | On securing IoT from Deep Learning perspective. , 2020, , .   |     | 8         |
| 16 | Decentralized Bandwidth Allocation Framework for Energy-Efficiency and Fog Integration in PONs. , 2020, , .   |     | 0         |
| 17 | Energy-Efficient Decentralized Framework for the Integration of Fog With Optical Access Networks. IEEE Transactions on Green Communications and Networking, 2020, 4, 927-938.                   | 3.5 | 11        |
| 18 | Towards Smart Trust Management of VANETs. , 2020, , .   |     | 4         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | A Novel Service Composition Approach for Offloading in Mobile Edge Computing. , 2020, , .  |     | 0         |
| 20 | Improving the Response Time of SDN Controllers Based on Vertical Handover. , 2020, , .   |     | 1         |
| 21 | Risk-based Trust Evaluation Model for VANETs. , 2020, , .  |     | 2         |
| 22 | A Framework for QoS-based Routing in SDNs Using Deep Learning. , 2020, , .   |     | 0         |
| 23 | Privacy Protection for E-Health Systems using Three-Factor User Authentication. , 2019, , .  |     | 1         |
| 24 | Discovery method for distributed denial-of-service attack behavior in SDNs using a feature-pattern graph model. Frontiers of Information Technology and Electronic Engineering, 2019, 20, 1195-1208. | 1.5 | 11        |
| 25 | Talk Half Listen To Half: Energy-Efficient Neighbor Discovery in Wireless Sensor Networks. , 2019, , .   |     | 3         |
| 26 | Lightweight remote user authentication protocol for multi-server 5G networks using self-certified public key cryptography. Journal of Network and Computer Applications, 2019, 131, 66-74.           | 5.8 | 72        |
| 27 | A Scheme to Design Community Detection Algorithms in Various Networks. Future Internet, 2019, 11, 41.  | 2.4 | 1         |
| 28 | Fair and Social-Aware Message Forwarding Method in Opportunistic Social Networks. IEEE Communications Letters, 2019, 23, 720-723.  | 2.5 | 20        |
| 29 | A Distributed Social-Aware Location Protection Method in Untrusted Vehicular Social Networks. IEEE Transactions on Vehicular Technology, 2019, 68, 6114-6124.  | 3.9 | 19        |
| 30 | Sleep Scheduling in Energy Harvesting Wireless Body Area Networks. IEEE Communications Magazine, 2019, 57, 95-101.   | 4.9 | 26        |
| 31 | Authentication Protocol for Real-Time Wearable Medical Sensor Networks Using Biometrics and Continuous Monitoring. , 2019, , .   |     | 4         |
| 32 | A Secure Blockchain-based Prescription Drug Supply in Health-care Systems. , 2019, , .   |     | 6         |
| 33 | Energy-Efficient Sleep Scheduling in WBANs: From the Perspective of Minimum Dominating Set. IEEE Internet of Things Journal, 2019, 6, 6237-6246.   | 5.5 | 8         |
| 34 | Keyless Semi-Quantum Point-to-point Communication Protocol with Low Resource Requirements. Scientific Reports, 2019, 9, 64.  | 1.6 | 2         |
| 35 | An improved network security situation assessment approach in software defined networks. Peer-to-Peer Networking and Applications, 2019, 12, 295-309.  | 2.6 | 43        |
| 36 | A Power-Efficient and Social-Aware Relay Selection Method for Multi-Hop D2D Communications. IEEE Communications Letters, 2018, 22, 1450-1453.  | 2.5 | 52        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Guest Editorial Special Section on Cloud Computing in Smart Grid Operation and Management. IEEE Transactions on Industrial Informatics, 2018, 14, 1207-1209.                      | 7.2 | 0         |
| 38 | Characterization and Detection of Tail Energy Bugs in Smartphones. IEEE Access, 2018, 6, 65098-65108.   | 2.6 | 8         |
| 39 | Towards More Dynamic Energy-Efficient Bandwidth Allocation in EPONs. , 2018, , .  |     | 6         |
| 40 | Modeling Handover Signaling Messages in OpenFlow-Based Mobile Software-Defined Networks. Journal of Computer Networks and Communications, 2018, 2018, 1-14.                       | 1.2 | 4         |
| 41 | Period Detection and Future Trend Prediction Using Machine Learning Techniques. , 2018, , .   |     | 0         |
| 42 | Relay-Based iBCP Multicasting in Software Defined Networks. , 2018, , .   |     | 1         |
| 43 | Activeâ€Source Seismic Tomography at the Brady Geothermal Field, Nevada, with Dense Nodal and Fiberâ€Optic Seismic Arrays. Seismological Research Letters, 2018, 89, 1629-1640. | 0.8 | 36        |
| 44 | On Improving Measurement Accuracy of DREAM Framework with Estimation Filters. , 2018, , .   |     | 0         |
| 45 | Towards Green Fog-LR-PON Integration for Wireless Backhuls. , 2018, , .   |     | 0         |
| 46 | Integrating Fog With Long-Reach PONs From a Dynamic Bandwidth Allocation Perspective. Journal of Lightwave Technology, 2018, 36, 5276-5284.                                       | 2.7 | 9         |
| 47 | Applying transmission-coverage algorithms for secure geocasting in VANETs. International Journal of Computational Science and Engineering, 2018, 16, 17.                          | 0.4 | 4         |
| 48 | A Hierarchical Approach to Handle Inter-domain Mobility in SDN-based Networks using Mobile IP. , 2018, , .  |     | 2         |
| 49 | Toward Parallel Edge Computing in Long-Reach PONs. Journal of Optical Communications and Networking, 2018, 10, 736.   | 3.3 | 13        |
| 50 | ACP: An Efficient User Location Privacy Preserving Protocol for Opportunistic Mobile Social Networks. , 2018, , .   |     | 2         |
| 51 | On the feasibility of service composition in a long-reach PON backhaul. , 2018, , .   |     | 3         |
| 52 | Performance Evaluation of Community Detection Algorithms Based on Relationship Strength Measurement. , 2018, , .  |     | 1         |
| 53 | Extended core-based community detection for directed networks. , 2017, , .  |     | 0         |
| 54 | Anonymous and Lightweight Authentication for Secure Vehicular Networks. IEEE Transactions on Vehicular Technology, 2017, 66, 10626-10636.   | 3.9 | 107       |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Distributed Localization for Participatory Sensing Systems. <i>Procedia Computer Science</i> , 2017, 110, 78-85.  | 1.2 | 0         |
| 56 | Effective role-assignment for participatory sensing systems. , 2017, , .  |     | 1         |
| 57 | Location privacy-protection based on p-destination in mobile social networks: A game theory analysis. , 2017, , .   |     | 5         |
| 58 | Learning automata based method for solving demand and supply problem with periodic behaviors. , 2017, , .   |     | 1         |
| 59 | A Distributed Approach to Improving EPC Controller Performance. , 2017, , .   |     | 1         |
| 60 | Economic No-Key Semi-Quantum Direct Communication Protocol. , 2017, , .   |     | 4         |
| 61 | ACPM: An associative connectivity prediction model for AANET. , 2016, , .   |     | 2         |
| 62 | A performance comparison of delay-tolerant network routing protocols. <i>IEEE Network</i> , 2016, 30, 46-53.  | 4.9 | 77        |
| 63 | Using support vector machines to solve the comparison-based system-level fault diagnosis problem. <i>International Journal of Parallel, Emergent and Distributed Systems</i> , 2016, 31, 176-200. | 0.7 | 4         |
| 64 | Fast and Scalable Counterfeits Estimation for Large-Scale RFID Systems. <i>IEEE/ACM Transactions on Networking</i> , 2016, 24, 1052-1064.   | 2.6 | 21        |
| 65 | Continuous Answering Holistic Queries over Sensor Networks. <i>IEEE Transactions on Parallel and Distributed Systems</i> , 2016, 27, 394-404.   | 4.0 | 1         |
| 66 | Improving flow completion time for short flows in datacenter networks. , 2015, , .  |     | 11        |
| 67 | Cascading failures in smart grid: Joint effect of load propagation and interdependence. <i>IEEE Access</i> , 2015, 3, 2520-2530.  | 2.6 | 79        |
| 68 | Efficient detection of faulty nodes with cuckoo search in t-diagnosable systems. <i>Applied Soft Computing Journal</i> , 2015, 29, 52-64.   | 4.1 | 7         |
| 69 | Energy Cost Models of Smartphones for Task Offloading to the Cloud. <i>IEEE Transactions on Emerging Topics in Computing</i> , 2015, 3, 384-398.  | 3.2 | 59        |
| 70 | SDN based ECN adaptation scheme for improving data center long flow throughput. , 2015, , .   |     | 0         |
| 71 | Multi-dimensional clustering and network monitoring system for aeronautical ad hoc networks. , 2015, , .  |     | 6         |
| 72 | Efficient Authentication Protocol for Secure Vehicular Communications. , 2014, , .  |     | 9         |

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|----|---|-----|-----------|
| 73 | Byzantine-Resilient Secure Software-Defined Networks with Multiple Controllers in Cloud. IEEE Transactions on Cloud Computing, 2014, 2, 436-447.                  | 3.1 | 87        |
| 74 | A social network approach to trust management in VANETs. Peer-to-Peer Networking and Applications, 2014, 7, 229-242.  | 2.6 | 103       |
| 75 | Editorial for Advances on Cognitive, Mobile and Ubiquitous Systems Special Issue. Mobile Networks and Applications, 2014, 19, 522-523.                            | 2.2 | 0         |
| 76 | Decentralized Access Control with Anonymous Authentication of Data Stored in Clouds. IEEE Transactions on Parallel and Distributed Systems, 2014, 25, 384-394.    | 4.0 | 184       |
| 77 | Adaptive Context Dissemination in Heterogeneous Environments. IEEE Transactions on Mobile Computing, 2014, 13, 1173-1185.   | 3.9 | 2         |
| 78 | Randomized carrier-based sensor relocation in wireless sensor and robot networks. Ad Hoc Networks, 2013, 11, 1951-1962.   | 3.4 | 29        |
| 79 | A Decentralized Security Framework for Data Aggregation and Access Control in Smart Grids. IEEE Transactions on Smart Grid, 2013, 4, 196-205.                     | 6.2 | 182       |
| 80 | Balancing System Survivability and Cost of Smart Grid Via Modeling Cascading Failures. IEEE Transactions on Emerging Topics in Computing, 2013, 1, 45-56.         | 3.2 | 73        |
| 81 | Guest Editorial: Networking Challenges in Cloud Computing Systems and Applications. IEEE Journal on Selected Areas in Communications, 2013, 31, 2593-2595.        | 9.7 | 1         |
| 82 | A harmony-seeking firefly swarm to the periodic replacement of damaged sensors by a team of mobile robots. , 2012, , .  |     | 15        |
| 83 | Localized load-aware geographic routing in wireless ad hoc networks. , 2012, , .  |     | 9         |
| 84 | Hybrid Mode Radio Link Control for Efficient Video Transmission over 4GLTE Network. , 2012, , .   |     | 2         |
| 85 | Cooperative Neighbor Discovery Protocol for a Wireless Network Using Two Antenna Patterns. , 2012, , .  |     | 5         |
| 86 | An online shadowed clustering algorithm applied to risk visualization in Territorial Security. , 2012, , .  |     | 3         |
| 87 | Comparison-Based System-Level Fault Diagnosis: A Neural Network Approach. IEEE Transactions on Parallel and Distributed Systems, 2012, 23, 1047-1059.             | 4.0 | 48        |
| 88 | Techniques for Enhancing TCP Performance in Wireless Networks. , 2012, , .  |     | 11        |
| 89 | A Distributed Constraint Satisfaction Problem Approach to Virtual Device Composition. IEEE Transactions on Parallel and Distributed Systems, 2012, 23, 1997-2009. | 4.0 | 8         |
| 90 | CAHR: Content aware adaptive HARQ retransmission scheme for 4G/LTE network. , 2012, , .   |     | 6         |

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|-----|--|-----|-----------|
| 91  | Controlled Straight Mobility and Energy-Aware Routing in Robotic Wireless Sensor Networks. , 2012, , .   |     | 13        |
| 92  | Localized Geographic Routing to a Mobile Sink with Guaranteed Delivery in Sensor Networks. IEEE Journal on Selected Areas in Communications, 2012, 30, 1719-1729.                              | 9.7 | 65        |
| 93  | Policy management: leveraging the open virtualization format with contract and solution models. IEEE Network, 2012, 26, 22-27.   | 4.9 | 3         |
| 94  | Cross layer design for efficient video streaming over LTE using scalable video coding. , 2012, , .   |     | 21        |
| 95  | Channel quality-based AMC and smart scheduling scheme for SVC video transmission in LTE MBSFN networks. , 2012, , .  |     | 18        |
| 96  | Biconnecting a network of mobile robots using virtual angular forces. Computer Communications, 2012, 35, 1038-1046.  | 3.1 | 22        |
| 97  | An Efficient Video Adaptation Scheme for SVC Transport over LTE Networks. , 2011, , .  |     | 7         |
| 98  | Carrier-Based Focused Coverage Formation in Wireless Sensor and Robot Networks. IEEE Transactions on Automatic Control, 2011, 56, 2406-2417.   | 3.6 | 28        |
| 99  | LaConf: A localized address autoconfiguration scheme for wireless ad hoc networks. Tsinghua Science and Technology, 2011, 16, 529-538.   | 4.1 | 3         |
| 100 | Intersection-Based Geographical Routing Protocol for VANETs: A Proposal and Analysis. IEEE Transactions on Vehicular Technology, 2011, 60, 4560-4574.  | 3.9 | 178       |
| 101 | Localized delayâ€bounded and energyâ€efficient data aggregation in wireless sensor and actor networks. Wireless Communications and Mobile Computing, 2011, 11, 1603-1617.                    | 0.8 | 12        |
| 102 | Communication protocols for vehicular <i>ad hoc</i> networks. Wireless Communications and Mobile Computing, 2011, 11, 567-582.   | 0.8 | 38        |
| 103 | Aâ€localized algorithm for bi-connectivity of connected mobileâ€robots. Telecommunication Systems, 2009, 40, 129-140.  | 1.6 | 31        |
| 104 | Measuring linearity of planar point sets. Pattern Recognition, 2008, 41, 2503-2511.  | 5.1 | 34        |
| 105 | Enhancing peer-to-peer systems through redundancy. IEEE Journal on Selected Areas in Communications, 2007, 25, 15-24.  | 9.7 | 28        |
| 106 | Characterization, testing and reconfiguration of faults in mesh networks. The Integration VLSI Journal, 2007, 40, 525-535.   | 1.3 | 1         |
| 107 | Localized routing with guaranteed delivery and a realistic physical layer in wireless sensor networks. Computer Communications, 2006, 29, 2550-2555.   | 3.1 | 11        |
| 108 | Greedy localized routing for maximizing probability of delivery in wireless ad hoc networks with a realistic physical layer. Journal of Parallel and Distributed Computing, 2006, 66, 499-506. | 2.7 | 14        |

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|-----|---|-----|-----------|
| 109 | Progress and Location Based Localized Power Aware Routing for Ad Hoc and Sensor Wireless Networks. International Journal of Distributed Sensor Networks, 2006, 2, 147-159.                      | 1.3 | 54        |
| 110 | A PARALLEL PROBABILISTIC SYSTEM-LEVEL FAULT DIAGNOSIS APPROACH FOR LARGE MULTIPROCESSOR SYSTEMS. Parallel Processing Letters, 2006, 16, 63-79.  | 0.4 | 9         |
| 111 | Physical layer impact on the design and performance of routing and broadcasting protocols in ad hoc and sensor networks. Computer Communications, 2005, 28, 1138-1151.                          | 3.1 | 55        |
| 112 | Hop count optimal position-based packet routing algorithms for ad hoc wireless networks with a realistic physical Layer. IEEE Journal on Selected Areas in Communications, 2005, 23, 1267-1275. | 9.7 | 86        |
| 113 | On characterization of catastrophic faults in two-dimensional VLSI arrays. The Integration VLSI Journal, 2004, 38, 267-281.   | 1.3 | 3         |
| 114 | Characterization of catastrophic faults in two-dimensional reconfigurable systolic arrays with unidirectional links. Information Processing Letters, 2004, 92, 189-197.                         | 0.4 | 3         |
| 115 | Enumerating catastrophic fault patterns in VLSI arrays with both uni- and bidirectional links. The Integration VLSI Journal, 2001, 30, 157-168.   | 1.3 | 4         |
| 116 | An improved testing scheme for catastrophic fault patterns. Information Processing Letters, 2000, 73, 199-206.  | 0.4 | 6         |
| 117 | Characterization of Catastrophic Faults in Reconfigurable Systolic Arrays. VLSI Design, 1998, 7, 143-150.   | 0.5 | 0         |
| 118 | On testing for catastrophic faults in reconfigurable arrays with arbitrary link redundancy. The Integration VLSI Journal, 1996, 20, 327-342.  | 1.3 | 8         |
| 119 | A note on isomorphic chordal rings. Information Processing Letters, 1995, 55, 339-341.  | 0.4 | 7         |
| 120 | Efficient construction of catastrophic patterns for VLSI reconfigurable arrays. The Integration VLSI Journal, 1993, 15, 133-150.  | 1.3 | 13        |
| 121 | Separation of D2EHPA and M2EHPA. Hydrometallurgy, 1988, 19, 309-320.  | 1.8 | 27        |