Research Publication

Dr. Shashank Srivastava

Associate Professor

Total Paper published in SCI/SCIE: 26

Total Paper published in **Scopus** indexed Journal: **05**

Total Paper Published in Conference: 18

Total Book Chapters: 2

Journal Paper Published / Accepted

2024

- Naveen Kumar, Shashank Srivastava, IBPC: An Approach for Mitigation of Cache Pollution Attack in NDN using Interface-Based Popularity, Arabian Journal for Science and Engineering (Springer) SCIE Indexed. (IF 2.9) (Accepted for Publication)
- 2. Naziya Aslam, Shashank Srivastava, MM Gore, DDoS SourceTracer: An Intelligent Application for DDoS Attack Mitigation in SDN, Computers and Electrical Engineering (Elsevier) SCIE Indexed vol 117(IF:4.3)
- 3. Naziya Aslam, Shashank Srivastava, M.M Gore, A Comprehensive Analysis of Machine Learning- and Deep Learning-Based Solutions for DDoS Attack Detection in SDN, Arabian Journal for Science and Engineering (Springer), SCIE Indexed (IF: 2.9)
- 4. **Neelam Dayal, Shashank Srivastava,** FloodKnight: an intelligent DDoS defense scheme to combat attacks near attack entry points, **Journal of Computer Virology and Hacking Techniques,**, **SCIE Indexed (IF: 2.0 Vol 20, Issue 2)**

- 1. Satya Deo Kumar Ram, Shashank Srivastava, KK Mishra, Redefining teaching-and-learning-process in TLBO and its application in cloud, **Applied Soft Computing** (Elsevier) (IF 8.7) Page: 110017, Vol 135, 2023. SCIE Indexed.
- Neelam Dayal, Shashank Srivastava, Analyzing effective mitigation of DDoS attack with software defined networking, Computer & Security (Elsevier) (IF 5.6) Vol 130, 2023. SCIE Indexed

- 3. Satya Deo Kumar Ram, Shashank Srivastava, KK Mishra, Redefining the Learning Mechanism in TLBO and its Applications for Flowtime-aware-cost Minimizing of the Workflow in Cloud, Concurrency and Computation: Practice and Experience (Wiley) SCIE Indexed. (IF:2.0)
- 4. Naziya Aslam, Shashank Srivastava, MM Gore, ONOS DDoS Defender: A Comparative Analysis of Existing DDoS Attack Datasets using Ensemble Approach, Wireless Personal Communications (Springer), SCIE Indexed Vol. 133, (IF: 2.2)

- 1. Satya Deo K Ram, Shashank Srivastava, Krishn Kumar Mishra, A new meta-heuristic approach for load aware-cost effective workflow scheduling, Concurrency and Computation: Practice and Experience (Wiley) e7112, 2022 (IF:2.0) SCIE Indexed.
- 2. Naziya Aslam, Shashank Srivastava, M.M Gore ,ONOS Flood Defender: An Intelligent Approach to Mitigate DDoS Attack in SDN, **Transactions on Emerging Telecommunications Technologies** (Wiley) e4534, 2022 (IF: 3.31) SCIE Indexed.
- 3. Satya Deo K Ram, Shashank Srivastava, Krishn Kumar Mishra, A Multi-objective Generalized Teacher-Learning-Based-Optimization Algorithm, Journal of The Institution of Engineers (India): Series B (Springer), 2022: 1-16, Scopus Indexed.
- 4. Ashutosh Kumar Singh, Shashank Srivastava, Shashwati Banerjea, Evaluating heuristic techniques as a solution of controller placement problem in SDN, Journal of Ambient Intelligence and Humanized Computing,(Springer) 2022, 1-18 (IF: 7.104) SCIE Indexed.

- 1. Satya Deo K Ram, Shashank Srivastava, Krishn Kumar Mishra, A variant of teaching-learning-based optimization and its application for minimizing the cost of Workflow Execution in the Cloud Computing, Concurrency and Computation: Practice and Experience (Wiley) e6425, 2021 (IF:2.0) SCIE Indexed.
- 2. Prasenjit Maity, Sandeep Saxena, Shashank Srivastava, Kshira Sagar Sahoo, Ashok Kumar Pradhan, Neeraj Kumar, An Effective Probabilistic Technique for DDoS Detection in OpenFlow Controller, **IEEE Systems Journal,** DOI: 10.1109/JSYST.2021.3110948, 2021 (**IF. 4.40**) **SCIE Indexed.**
- 3. Nitin Shukla, Dipmalya Datta, Mayank Pandey, Shashank Srivastava, Towards software defined low maintenance structured peer-to-peer overlays, **Peer-to-Peer Networking and Applications (Springer US)**, pp 1-19, 2021 (**IF:4.2**) **SCIE Indexed.**
- 4. Neelam Dayal, Shashank Srivastava, SD-WAN Flood Tracer: Tracking the entry points of DDoS attack flows in WAN, Computer Networks (Elsevier), Vol 86, 2021 (IF:5.6) SCIE Indexed.
- 5. Shashank Srivastava, Sandeep Saxena, Rajkumar Buyya, Manoj Kumar, Achyut Shankar, Bharat Bhushan, CGP: Cluster-based Gossip Protocol for Dynamic Resource Environment in Cloud, **Simulation Modelling Practice and Theory** (**Elsevier**), 2021, (**IF: 4.2**) **SCIE Indexed.**

- 1. Ashutosh Kumar Singh, Saurabh Maurya and Shashank Srivastava, Varna-based Optimization: A Novel Method for Capacitated Controller Placement Problem in SDN, Frontiers of Computer Science (Springer), Vol 14, 2020 (IF: 4.2) SCIE Indexed.
- 2. Ashutosh Kumar Singh, Saurabh Maurya, Naveen Kumar and Shashank Srivastava, Heuristic approaches for the reliable SDN controller placement problem, **Transactions on Emerging Telecommunications Technologies (Wiley)** Vol 31, 2020 (**IF: 3.31**) **SCIE Indexed.**

- 1. Naveen Kumar, Ashutosh Kumar Singh, Abdul Aleem, and Shashank Srivastava, Security Attacks in Named Data Networking: A Review and Research Directions, **Journal of Computer Science and Technology (Springer)**, vol 34, pp 1319-1350, 2019 (**IF:1.9**) **SCIE Indexed.**
- 2. Nitin Shukla and Mayank Pandey and Shashank Srivastava, Formal Modeling and Verification of Software-defined Networks: A Survey, **International Journal of Network Management (Wiley)** Vol 29, 2019 (**IF:1.5**) **SCIE Indexed.**
- 3. Naveen Kumar, Abdul Aleem, Ashutosh Kumar Singh, and Shashank Srivastava, NBP: Namespace-based Privacy to Counter Timing-based Attack in Named Data Networking, **Journal of Network and Computer Applications (Elsevier),** Vol 144, pp 155-170, 2019 (**IF:8.7**) **SCIE Indexed.**
- 4. Naveen Kumar, Ashutosh Kumar Singh, and Shashank Srivastava, Feature selection for interest flooding attack in named data networking, **International Journal of Computers and Applications (Taylor & Francis)**, Vol 43, pp 537-546. 2019 (**Scopus Indexed**).
- 5. Ashutosh Kumar Singh, Naveen Kumar, and Shashank Srivastava, PSO and TLBO based Reliable Placement of Controllers in SDN, **International Journal of Computer Network and Information Security (IJCNIS) (MECS Press)** vol 11, pp 36-42, 2019 (**Scopus Indexed**).

- 1. Ashutosh Kumar Singh, Shashank Srivastava, Varna-based optimization: A new method for solving global optimization, **Int J Intell Syst Appl (MECS Press)**, vol 10,PP 1-15 2018.
- 2. Naveen Kumar, Ashutosh Kumar Singh, and Shashank Srivastava, A Triggered Delay-based Approach against Cache Privacy Attack in NDN, **International Journal of Networked and Distributed Computing (Atlantis Press Part of Springer Nature)**, vol 6, 174-184, 2018 (**Scopus Indexed**).
- 3. Ashutosh Kumar Singh and Shashank Srivastava, A Survey and Classification of Controller Placement Problem in SDN, International Journal of Network Management (Wiley), vol 28, 2018, (IF:1.5) SCIE Indexed.

1. Sandeep Saxena, Goutam Sanyal, Shashank Srivastava, Ruhul Amin, Preventing from Cross-VM Side-Channel Attack Using New Replacement Method, **Wireless Personal Communications** (**Springer US**), vol 80, pp 1-28, 2017 (**IF: 2.2**) **SCIE Indexed.**

2016

1. Neelam Dayal, Prasenjit Maity, Shashank Srivastava, Rahamatullah Khondoker, Research Trends in Security and DDoS in SDN, Security and Communication Networks, (John Wiley & Sons, Ltd), vol 9, 6386-6411, 2016 (IF:1.719) SCIE Indexed.

2014

1. Shashank Srivastava, GC Nandi, Fragmentation Based Encryption Approach for Self-Protected Mobile Agent, Journal of King Saud University-Computer and Information Sciences, (Elsevier), vol 26, pp. 131-142, 2014 (IF:6.9) SCIE Indexed.

2013

1. Shashank Srivastava, GC Nandi, Self-Reliant Mobile Code: A New Direction of Agent Security, **Journal of Network and Computer Application**, (**Elsevier**) vol 37, pp. 62-75, 2013 (**IF:8.7**) **SCIE Indexed.**

Book Chapter

2021

- 1. Shashwati Banerjea, Shashank Srivastava, Distributed Denial of Service Attacks in SDN Context, Software-Defined Networking for Future Internet Technology. Apple Academic Press, 2021. 57-88.
- 2. Shashwati Banerjea, Shashank Srivastava, Sachin Kumar, Data Security in the Internet of Things: Challenges and Opportunities. **Big Data Analytics for Internet of Things** (2021): 265-284.

Conference Paper Published

2020

1. Chaitanya Kumar, Bathini Pranay Kumar, Aditya Chaudhary, Ayush Gupta, Kapil Dev, Ayushi Sharma, Shashank Srivastava and Rajitha B, Intelligent DDoS Detection System in Software-Defined Networking. 6th IEEE CONECCT 2020.

- 1. Naveen Kumar and Shashank Srivastava, A Triggered Delay-based Approach against Cache Privacy Attack in NDN, 17th International Conference on Computer and Information Science (ICIS), pp 22-27, 2018.
- 2. Nitin Shukla, Anurag Bamal, Shashank Srivastava, and Mayank Pandey, Software Defined Underlay-aware Structured Peer-to-Peer Overlay, 19th International Conference on Distributed Computing and Networking, 1-10, 2018.
- **3.** Neelam Dayal, Shashank Srivastava, Leveraging SDN for Early Detection and Mitigation of DDoS Attacks, IEEE International Conference on Communication Systems and Networks, LNCS 52-75, 2018.
- **4.** Neelam Dayal, Shashank Srivastava, An RBF-PSO based approach for early detection of DDoS attacks in SDN, 10th International Conference on Communication Systems \& Networks (COMSNETS), vol 17-24, 2018.

- 1. Naveen Kumar, Ashutosh Kumar Singh and Shashank Srivastava, Evaluating Machine Learning Algorithms for Detection of Interest Flooding Attack in Named Data Networking, 10th International Conference On Security Of Information And Networks(ACM SIN), 299-302, 2017.
- 2. Nivindar Kaur, Ashutosh Kumar Singh, Naveen Kumar and Shashank Srivastava, Performance Impact of Topology Poisoning Attack in SDN and its Countermeasure, 10th International Conference On Security Of Information And Networks (ACM SIN), 179-184, 2017.
- 3. Neelam Dayal, Shashank Srivastava, Analyzing behavior of DDoS attacks to identify DDoS detection features in SDN, 9th IEEE International Conference on Communication Systems and Networks (COMSNET), pp 274-281, 2017.

2015

- 1. Shashank Srivastava, Divya Kumar, Shuchi Chandra, Trust analysis of execution platform for self protected mobile code, International Conference Advances in Computing, Communications and Informatics (ICACCI) IEEE, 1904-1909, 2015.
- 2. Prashant Misra, Shashank Srivastava, Nishant Narang, Sonu Goel, Prasenjit Maity, Aditya Saxena, A hierarchical approach to adaptive distributed scheduling in cloud, International Conference Advances in Computing, Communications and Informatics (ICACCI), 1678-1687, 2015.

2014

- 1. Anjali Pandey, Shashank Srivastava, An approach for virtual machine image security, International Conference Signal Propagation and Computer Technology (ICSPCT) IEEE, 616-623, 2014.
- 2. Sandeep Saxena, Goutam Sanyal, Shashank Srivastava, Mutual authentication protocol using identity-based shared secret key in cloud environments, Recent Advances and Innovations in Engineering (ICRAIE) IEEE, 1-6, 2014.

1. Shashank Srivastava, Avinash Kumar Singh, GC Nandi, Inter cipher block diffusion: a novel transformation for proposed parallel AES, 2nd IEEE International Conference on Communication, Computing & Security, pp 872-879, 2012.

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- 1. Shashank Srivastava, GC Nandi, Protection of mobile agent and its itinerary from malicious host, Computer and Communication Technology (ICCCT), 2nd IEEE International Conference, 405-411, 2011.
- 2. Shashank Srivastava, Abhinav Goyal, Rajeev Kumar, Nandi GC, Statistical Analysis of Network Traffic over LAN through IAMT, 5th International Conference on Information Processing, ICIP (Springer), 329-335, 2011.
- 3. Shashank Srivastava, GC Nandi, Detection of mobile agent's blocking in secure layered architecture, Communication Systems and Network Technologies (CSNT), IEEE International Conference, 43-48, 2011.

- 1. Shashank Srivastava, GC Nandi, Enhancing the efficiency of secure network monitoring through mobile agents, Computer and Communication Technology (ICCCT), International Conference, IEEE, 141-148, 2010.
- 2. Shashank Srivastava, GC Nandi, Localization of mobile robots in a network using mobile agents, Computer and Communication Technology (ICCCT), International Conference, IEEE, 415-420, 2010.