



Swagat Kumar Jena, M.Tech

Designation : Assistant Professor

Department : Department of Computer Science and Engineering
(JOINED THE INSTITUTE IN 2023)

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RESEARCH INTERESTS

- ✓ Embedded software development
- ✓ Internet of Things (IoT)
- ✓ Network Security policy verification and compliance

Academic Qualifications

- ✓ M. Tech (IT), IIT Kharagpur, India
- ✓ B. Tech (CSE), BPUT Rourkela, Odisha, India

Teaching Experience/Industrial Experience/Research Experience

- ✓ 13 years of Teaching experience
- ✓ 2 years of research experience at IIT Bhubaneswar

PUBLICATIONS

JOURNALS & CONFERENCES

- [1] Tripathy, B. K., Sahoo, K. S., Luhach, A. K., Jhanjhi, N. Z., & **Jena, S. K.** (2022). A virtual execution platform for OpenFlow controller using NFV. *Journal of King Saud University - Computer and Information Sciences*, 34(3), 964–971. <https://doi.org/10.1016/j.jksuci.2020.03.001> [SCI]
- [2] Tripathy, B. K., **Jena, S. K.**, Reddy, V., Das, S., & Panda, S. K. (2021). A novel communication framework between Manet and WSN in IOT based Smart Environment. *International Journal of Information Technology*, 13(3), 921–931. <https://doi.org/10.1007/s41870-020-00520-x> [SCOPUS]
- [3] Tripathy, B. K., **Jena, S. K.**, Bera, P., & Das, S. (2020). An Adaptive Secure and Efficient Routing Protocol for Mobile Ad Hoc Networks. *Wireless Personal Communications*, 114(2), 1339–1370. <https://doi.org/10.1007/s11277-020-07423-x> [SCI]

- [4] **Jena, S. K.**, Tripathy, B. K., Gupta, P., & Das, S. (2019). A Kerberos Based Secure Communication System in Smart (Internet of Things) Environment. *Journal of Computational and Theoretical Nanoscience*, 16(5), 2381–2388. <https://doi.org/10.1166/jctn.2019.7904> [SCOPUS]
- [5] Tripathy, B. K., **Jena, S. K.**, Bera, P., & Das, S. (2019). A new mobility control approach for improved route availability in mobile ad hoc networks. *Arabian Journal for Science and Engineering*, 44(11), 9627–9639. <https://doi.org/10.1007/s13369-019-03899-3> [SCI]
- [6] Tripathy, B. K., Das, D. P., **Jena, S. K.**, & Bera, P. (2018). *Risk based Security Enforcement in Software Defined Network*. *Computers and Security*, Elsevier 78, 321-335. <https://doi:10.1016/j.cose.2018.07.010> [SCI]
- [7] **Jena, S. K.**, Das, S., & Sahoo, S. P (2018). *Design and Development of a Parallel Lexical Analyzer for C Language*. *International Journal of Knowledge-Based Organizations*, 8(1), 68-82. <https://doi:10.4018/ijkbo.2018010105> [ACM Digital]

PATENTS FILED

- **Title:** Intelligent Monitoring and Management of Irrigation in Agricultural Fields
Patent Application No : 201931014953
Date of Filing : 13-04-2019
Date of Publication : 10-07-2020.
Awarding Organization: Office of the Controller General of Patents, Designs and Trade Marks (CGPDTM), Govt. of India.

PROJECT
FUNDING

- **Title of the Project:** Development of a Proof-of-Concept Model for the Implementation of Smart Nano Grid Automation System for Monitoring, Control and Automation (In Energy Research Domain).
Position: Co-investigator
Funding Agency: TEQIP-III Collaborative Research Initiative Scheme (CRIS), BPUT, Odisha.
Total Amount in Lakhs: Rs. 3,00,000/-
Duration: 3 years (2018-2020)
Status: Completed

TRAINING /
WORKSHOP
CONDUCTED

- Organized a National level Webinar as convener on “WOMEN HARASSMENT IN DIGITAL SPACE IN INDIA” sponsored by National Commission for Women, New Delhi, Govt. of India. on 29th Dec, 2020 at Trident Academy of Technology, Bhubaneswar.
- Organized a short-term course on “Introduction to Cyber Security and Cyber Forensics” conducted by Centre for Development of Advanced Computing, Kolkata, Govt. of India from on 9th July 2019 to 16th July 2019 at Trident Academy of Technology, Bhubaneswar.

AWARDS /
ACHIEVEMENTS

- Received **Letter of Appreciations** from the project coordinator for **research excellence** during my project tenure at **IIT Bhubaneswar**.
- **Super Mentor Award** from Trident Group of Institutions for being an outstanding achiever in inter college events during session 2022-23 session.
- **E-Summit'23 Award (IIT Bhubaneswar):** Mentor of the **Winning team and 1st runners up team** of E-Summit'23 for the event Innovation Expo (innovative projects competition) organized by IIT Bhubaneswar on 4th Feb, 2023.
- **12th Project Innovation Contest-2023 Award (KIIT):** Mentor of the **Winning team** of 12th Project Innovation Contest-2023 Award which was a part of 19th International Conference on Distributed Computing and Intelligent Technology (ICDCIT), Springer-2023 organized by KIIT from 18th January 2023 to 21st January, 2023.
- **Silicon Technodium 2021 Award:** Mentor of the **1st runners up team** in National level Poster competition organized by Silicon Institute of Technology in association with IEEE student chapter, CSI student chapter and ISTE students' chapter on 17th April, 2021.