

AUGUST 2025

# CYBER GAZETTE

NEWS LETTER

AUGUST 2025

DEPARTMENT OF  
COMPUTER SCIENCE AND ENGINEERING  
(CYBER SECURITY)



School of Engineering

DAYANANDA SAGAR UNIVERSITY

MAIN CAMPUS,  
HAROHALLI, KANAKAPURA - 562112

# RESEARCH ACCOMPLISHMENTS

## SCAM-QUAVs: Side Channel Attacks Mitigation and Countermeasures of Quantum-Safe UAVs

Dr.Durbadal Chattaraj, Dr. G. Hemanth Kumar, Dr. Dilip Kumar Jang Bahadur Saini, Prof. Naveen Kulkarni, Prof. Sharanabasappa Tadkal, and Prof. Ranjima P have successfully authored and presented a paper titled “SCAM-QUAVs: Side Channel Attacks Mitigation and Countermeasures of Quantum-Safe UAVs” in the 11<sup>th</sup> International Conference on Electronics, Computing and Communication technologies, IEEE CONECCT(July 10-13,2025) organized by IEEE Bangalore section at Sterling's Mac Hotel, Bangalore.



# RESEARCH ACCOMPLISHMENTS

## Building Data-Driven Edge Systems for Business Success

Dr.Dilip Kumar Jung Bahadur Saini has authored and published a book titled “Building Data-Driven Edge Systems for Business Success” Co-authored by Minakshi (King Khalid University, Saudi Arabia), Tarun Kumar (University of Petroleum and Energy Studies, Dehradun, India), Kapil Joshi (Uttaranchal University, India), Akash Saxena (Compucom Institute of Technology and Management, India)

This comprehensive 478-page publication, released in August 2025, offers valuable insights into leveraging data-driven edge computing solutions for enhancing business performance and innovation.

### Publication Details:

- Publisher Copyright: © 2026
- Release Date: August, 2025
- DOI: 10.4018/979-8-3373-1147-0
- ISBN: 9798337311470 (Hardcover) | 9798337311487 (Softcover) | 9798337311494 (eBook)

### Verification Link:

[Dr. Dilip Kumar Jang Bahadur Saini has published his research paper titled " Novel Approach for Identification of Ayurveda Plant Using New Age Technology" in the Proceedings of Fourth International Conference on Computing and Communication Networks ICCCN 2024, Volume 6](#)



The screenshot shows the IGI Global website for the book "Building Data-Driven Edge Systems for Business Success". The page includes the book cover, title, authors (Dr. Dilip Kumar Jang Bahadur Saini, Minakshi, Tarun Kumar, Kapil Joshi, Akash Saxena), and purchase options. The book is available in Hardcover (\$190.00), Softcover (\$190.00), and eBook (\$200.00). The page also features social media sharing buttons and links to the book's page on Google Scholar and OAIster.

# RESEARCH ACCOMPLISHMENTS

## File carving for Digital Forensics: Moving Beyond Conventional Methods to AI-Powered Solutions

Dr.Devi Priya V S , along with co-authors P.Naresh Nivetha R, Shreyas Rajendra Hole, Mubeen Ahamed Khan, and Tanvir, presented their research paper titled “File carving for Digital Forensics: Moving Beyond Conventional Methods to AI-Powered Solutions” at the Third International Conference on Networks & Advances in Computational Technologies (NetACT 2025). The conference was held from 7th to 9th August 2025, organized by the Department of Computer Science and Engineering, Mar Baselios College of Engineering and Technology, Thiruvananthapuram, in association with IEEE Kerala Section.



# RESEARCH ACCOMPLISHMENTS

## Gender Classification Based on Machine Learning Models

Dr.Mubeen Ahmed Khan, Prof.Naveen Kulkarni and Prof.Abdul Haq Nalband has collaboratively published their research paper titled “Gender Classification Based on Machine Learning Models” at the 2025 4th O.P. Jindal University International Technology Conference on Smart Computing for Innovation and Advancement in Industry 5.0 (OTCON 2025).

The study explores the use of deep learning algorithms for gender classification in scenarios involving obscured facial features, such as veiled faces, and body posture data. By evaluating models using metrics such as accuracy, precision, recall, and F1-score, the research provides valuable insights into both the potential and limitations of automated gender categorization. This work contributes to advancing fairness and inclusivity in AI-driven decision-making systems.

DOI: 10.1109/OTCON65728.2025.11070606



The screenshot shows a digital publication page for the paper. At the top is a portrait of the author, Dr. Mubeen Ahmed Khan. Below the portrait is the title 'Gender Classification Based on Machine Learning Models'. The page includes a brief abstract, author information, and a 'Read Paper' button.

**Gender Classification Based on Machine Learning Models**

DOI: 10.1109/OTCON65728.2025.11070606

Published in: *2025 4th O.P. Jindal University International Technology Conference on Smart Computing for Innovation and Advancement in Industry 5.0 (OTCON 2025)*

Authors: **Dr. Mubeen Ahmed Khan\***, Prof. Naveen Kulkarni, Prof. Abdul Haq Nalband

\*Department of Computer Applications, Jindal University, Noida, India

Keywords: Gender classification, Machine learning, Deep learning, Veiled faces, Body posture.

**Abstract**

Inclusive gender representation has become an increasingly important area of concern, given societal norms, such as gender stereotypes, leading to a demand for gender equality. This research explores the efficacy of deep learning algorithms for gender classification using veiled faces and body posture. This work compares several deep learning models trained on a specifically curated dataset to identify the most accurate and efficient model for gender classification in obscured facial features and body postures. This study attempts to provide insights into the stability and robustness of gender classification with obscured facial features and body postures. This work further provides insights into model interpretation and gender bias. The results indicate that the proposed model is highly accurate and robust, outperforming other models. This work also provides the model's fairness dimensions and the relationship between gender equality and the gender and development of AI technology.

# RESEARCH ACCOMPLISHMENTS

## Vulnerabilities and Security Challenges on the Internet of Things Devices

Dr. Dilip Kumar Jang Bahadur Saini has co-authored and published a conference paper titled “Vulnerabilities and Security Challenges on the Internet of Things Devices” in Springer Nature – Innovations in Data Analytics (ICIDA 2024, Lecture Notes in Networks and Systems, Volume 1408). This paper was co-authored with Rajesh Kumar, Ashwini Biradar, Keshav Kaushik, Amitava Choudhury, and Sagar Kolekar. The work was published online on 22nd August 2025 and appears on pp. 481–508.

### Publication Details:

- Release Date: August, 2025
- DOI: 10.1007/978-981-96-6297-5\_37
- ISBN: 978-981-96-6296-8 (Print) | 978-981-96-6297-5 (Online)

### Verification Link:

[Dr. Dilip Kumar Jang Bahadur Saini has published a conference paper titled “Personalized Federated Learning for Privacy-Preserving and Scalable IoT-Driven Smart Healthcare” at the 3rd International Conference on Inventive Computing and Informatics \(ICICI\), 2025 in Bangalore.](#)

Date of Conference: 04-06 June 2025

DOI: 10.1109/ICICI65870.2025.11069877



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**Vulnerabilities and Security Challenges on the Internet of Things Devices**

Conference paper | First Online: 22 August 2025  
DOI: 10.1007/978-981-96-6297-5\_37

Editor-in-Chief: Aditya Bhatia, Kishan Mehta, Dilip Kumar Jang Bahadur Saini, Amitava Choudhury, Sagar Kolekar

Published online: 22 August 2025

Part of the book series: Lecture Notes in Networks and Systems (LNNS) (Volume 1408)

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Innovations in Data Analytics (ICIDA 2024)

# RESEARCH ACCOMPLISHMENTS

## Quantum-Safe Protocols Design for IoT Communications: Critical Observation and Analysis

Dr. Durbadal Chattaraj co-authored and mentored below students from cyber security

Mr.

Abhishek Paul (ENG21CY0002), Ms. Ananya Kasiraj (ENG22CY3001), Ms. Ananya R (ENG21CY0006), Ms. Bindurani K.P (ENG21CY0010) and successfully presented their research paper titled:

“Quantum-Safe Protocols Design for IoT Communications: Critical Observation and Analysis”

at the XXII Control Instrumentation Systems Conference (CISCON) 2025, technically co-sponsored by IEEE Bangalore Section. The conference was held in hybrid mode on 1st–2nd August 2025, organized by the Department of Instrumentation and Control Engineering, Manipal Institute of Technology, Manipal, Karnataka, India.



# RESEARCH ACCOMPLISHMENTS

## SEAT-FA: Automated Sub-domain Enumeration Tool for Security Auditing of Fintech Industries

Dr. Durbadal Chattaraj, along with Mr. Niranjan Hegde and Mr. Shashank B S (ENG21CY0040) has presented a research paper titled:

“SEAT-FA: Automated Sub-domain Enumeration Tool for Security Auditing of Fintech Industries” at the XXII Control Instrumentation Systems Conference (CISCON) 2025, technically co-sponsored by IEEE Bangalore Section. The conference was held in hybrid mode on 1st–2nd August 2025, organized by the Department of Instrumentation and Control Engineering, Manipal Institute of Technology, Manipal, Karnataka, India.



# **FACULTY ACCOMPLISHMENTS**

## **One-Week Faculty Development Programme (FDP) on “Malware Analysis with Data Science”**

Prof. Sharanabasappa Tadkal has successfully participated in a One-Week Faculty Development Programme (FDP) on “Malware Analysis with Data Science”, held from June 23 to June 29, 2025.

The FDP was organized by the Electronics and ICT Academy, National Institute of Technology (NIT) Patna, under the aegis of the Ministry of Electronics and Information Technology (MeitY), Government of India. The program was conducted as part of the MeitY's initiative to build technical capacity through the “Scheme of Financial Assistance for Setting up of Electronics and ICT Academies (Phase-II)”.



# FACULTY ACCOMPLISHMENTS

## Reviewer for research papers at the XXII Control Instrumentation Systems Conference (CISCON) 2025

Dr. Durbadal Chattaraj, contributed as a Reviewer for research papers at the XXII Control Instrumentation Systems Conference (CISCON) 2025, technically co-sponsored by IEEE Bangalore Section.

The conference was held in hybrid mode on 1st–2nd August 2025, organized by the Department of Instrumentation and Control Engineering, Manipal Institute of Technology, Manipal, Karnataka, India.



# **FACULTY ACCOMPLISHMENTS**

## **Five-Day Faculty Development Program (FDP) on “GenAI and Prompt Engineering”**

Prof. Sharanabasappa Tadkal has successfully participated in a Five-Day Faculty Development Program (FDP) on “GenAI and Prompt Engineering” organized by the Department of Computer Science and Engineering, New Horizon College of Engineering, Bangalore.

The FDP was conducted from 28th July to 1st August 2025 and focused on enhancing knowledge and skills in the emerging domains of Generative AI and Prompt Engineering.



# STUDENT ACCOMPLISHMENTS

Mr.Saurav Pandey(ENG22CY0039) has successfully completed the eJPT (eLearn Security Junior Penetration Tester) certification, on July 31, 2025, by INE Security.

The eJPT certification validates foundational knowledge and hands-on skills in penetration testing, including network security, information gathering, vulnerability assessment, exploitation, and basic post-exploitation techniques..



# STUDENT ACCOMPLISHMENTS

Mr. Manav Rathod(ENG23CY0025) has successfully completed the eJPT (eLearn Security Junior Penetration Tester) certification, on August 1, 2025, by INE Security.

The eJPT certification validates foundational knowledge and hands-on skills in penetration testing, including network security, information gathering, vulnerability assessment, exploitation, and basic post-exploitation techniques.



# **STUDENT ACCOMPLISHMENTS**

Ms. R K Gowri Priya(ENG23CY0034) has successfully completed a continuing education course in Digital Forensics Basics, offered by Cybrary.

This certification, awarded on August 3, 2025, recognizes her completion of a 2-hour training program and achievement of 1 CEU/CPE credit. The course focused on foundational principles of digital forensics—an essential discipline for identifying, preserving, analyzing, and presenting digital evidence in cybersecurity and cybercrime investigations.



# **STUDENT ACCOMPLISHMENTS**

Mr.Aman Nayan(ENG23CY0004) has successfully completed the Blue Team Junior Analyst training pathway offered by Security Blue Team on August 6, 2025.

This certification validates comprehensive entry-level expertise and practical skills in critical areas of cybersecurity, including:

- Open-Source Intelligence (OSINT)
- Digital Forensics
- Vulnerability Management
- Dark Web Operations
- Threat Hunting
- Network Analysis

