

FACULTY PROFILE

Name : **Dr Shashank Dhananjaya**
Designation : **Associate Professor and Head**
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About: Dr. Shashank Dhananjaya is an Associate Professor and Head of the Department of Information Science and Engineering at The National Institute of Engineering (NIE), Mysuru. A passionate teacher and researcher, he has over a decade of experience in academia and industry, including prior industry experience as a Software Engineer at NXP Semiconductors, Bengaluru. His research interests include Cybersecurity, Artificial Intelligence, Cloud Computing, Internet of Things (IoT), Wireless Sensor Networks, and Cognitive Radio Networks. He has published several research articles in reputed international journals and conferences indexed in Scopus and other scholarly databases. Dr. Shashank has delivered expert and invited talks at academic and government institutions on emerging technologies. He is a recipient of recognitions such as the IUCEE Teaching and Learning Award and the Interscience Young Investigator Award, and actively mentors students in research and innovation.

Qualification:

- B.E. in Computer Science and Engineering, VTU, Belagavi
- M.Tech. in Software Engineering, SJCE, Mysuru (VTU)
- Ph.D., VTU, Belagavi – Security Framework for Cognitive Radio Networks

Courses Taught: (Recently)

1. Deep Learning
2. Python Programming
3. Java Programming
4. Advanced Computer Networks
5. Cloud Computing
6. Software Engineering

Publications

Journal Publications

1. **Shashank Dhananjaya**, et al. (2025): “Early Detection and Severity Classification of Diabetic Retinopathy Using Convolutional Neural Networks”, *SN Computer Science*, 6(7), Article 819. DOI: 10.1007/s42979-025-04361-y.
2. **Shashank Dhananjaya**, et al. (2025): “An Advanced AI Framework for Mental Health Diagnostics Using Bidirectional Encoder Representations from Transformers with Gated Recurrent Units and Convolutional Neural Networks”, *Ingénierie des Systèmes d’Information*, 30(1), pp. 213–220. DOI: 10.18280/isi.300118.

3. **Shashank Dhananjaya**, et al. (2025): “A Framework for Video Surveillance Suspicious Activity Detection”, *Engineering, Technology & Applied Science Research*, 15(4), pp. 25402–25406. DOI: 10.48084/etasr.11437.
4. **Shashank Dhananjaya**, et al. (2025): “Analysis and Prediction of Emotional and Interaction Patterns in Autistic and Non-Autistic Children with VGG and Inception Models”, *Journal of Information Systems Engineering and Management*, 10(14s).
5. **Shashank Dhananjaya**, et al. (2024): “Millets Industry Dynamics: Leveraging Sales Projection and Customer Segmentation”, *SN Computer Science*, 5(8), Article 1063. DOI: 10.1007/s42979-024-03437-5.
6. **Shashank Dhananjaya**, et al. (2024): “An Energy-Efficient and Secure WSN Routing Protocol Using Bayesian Networks and Elitist Genetic Algorithms”, *Journal Européen des Systèmes Automatisés*, 57(6), pp. 1547–1555. DOI: 10.18280/jesa.570601.
7. **Shashank Dhananjaya**, et al. (2024): “A Real-Time Application for Crime Trends Prediction Using Machine Learning Algorithms”, *Library Progress International*, 44(4).

Conference Proceedings

1. **Shashank Dhananjaya**, et al. (2025): “AI Infused Secure Biometric Authentication for Remote Patient Monitoring Systems”, *Proceedings of the 2nd International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering (RMKMATE 2025)*. DOI: 10.1109/RMKMATE64874.2025.11042770.
2. **Shashank Dhananjaya**, et al. (2024): “End-to-End Model to Reduce the Inference, Jamming and Increase Trust from Compromised Secondary Nodes in Cognitive Radio Networks”, *Proceedings of the 2nd International Conference on Intelligent and Innovative Technologies in Computing, Electrical and Electronics (ICIITCEE 2024)*. DOI: 10.1109/IITCEE59897.2024.10467580.
3. **Shashank Dhananjaya**, et al. (2018): “A Novel Method in Matched Filter Spectrum Sensing to Minimize Interference from Compromised Secondary Users of Cognitive Radio Networks”, *Proceedings of the 3rd International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques (ICEECCOT 2018)*, pp. 228–231. DOI: 10.1109/ICEECCOT43722.2018.9001622.

Book Chapters

1. **Shashank Dhananjaya**, et al. (2024): “Identification of Counterfeit Products Using Blockchain in E-Commerce”, *Lecture Notes in Networks and Systems*, Vol. 1021, Springer, pp. 465–482. DOI: 10.1007/978-981-97-3591-4_36.

Other achievements:

Research Supervision: Recognized Research Supervisor (Ph.D.) – Visvesvaraya Technological University (VTU) with a research scholar currently registered under supervision.

Awards and Recognitions

1. **IUCEE Teaching and Learning Award (2024)** – Presented at the 11th International Conference on Transformation in Engineering Education for excellence in teaching and learning practices.
2. **Ballistic Learning® Recognized AI Course Instructor Award (2024)** – In recognition of excellence in Artificial Intelligence education and course delivery.

3. **Best Paper Award (2018)** – IEEE International Conference on Communication, Computer and Optimization Techniques for the paper titled “*A Novel Method in Matched Filter Spectrum Sensing to Minimize Interference from Compromised Secondary Users of Cognitive Radio Networks.*”
4. **Interscience Young Investigator Award (2012)** – Conferred by Interscience Research Networks for outstanding research contributions.

Professional Service

1. **Reviewer** – Reviewer for reputed Q1 Scopus indexed Elsevier journals including *Computer Communications*, *Engineering Applications of Artificial Intelligence*, and *Software Impacts*.
2. **Session Chair** – IEEE International Conference on Sustainable Technologies (ICST 2025), NIE Mysuru.
3. **Jury Member** – ELEVATE 2024 (Multi-City Pitching) under Idea2PoC Grant-in-Aid Scheme, Karnataka Government Startup Policy 2022–2027.

Professional Certifications

1. **EMC Certified Professional – Cloud Infrastructure and Services (EMCCIS).**

Professional Membership / Roles

1. **Cyber Crime Intervention Officer (CCIO)** – ISAC Foundation (Information Sharing and Analysis Center), contributing to cybersecurity awareness and digital safety initiatives.

Invited / Expert Talks / Panel Discussions

1. **Expert Talk** (June 2019) – “*Introduction to Artificial Intelligence and Machine Learning*”, Rajkiya Engineering College, Banda, Dr. A. P. J. Abdul Kalam Technical University, Uttar Pradesh.
2. **Invited Talk** (2022) – “*E-Governance and Data Science: Policy Framework for E-Governance and Data Science in Public Governance*”, Administrative Training Institute, Government of Karnataka, Mysuru.
3. **Invited Talk** (2023) – “*Defending the Digital Frontier: Navigating the Cybersecurity Landscape in a Hyperconnected World*”, CRESTA Management School.
4. **Invited Talk** (2026) – “*Technology in Prison Administration*”, National Workshop organized by Mysuru Prison & Correctional Services in collaboration with the Bureau of Police Research and Development, Ministry of Home Affairs, Government of India.
5. **Technical Panel Discussion Member** (December 2025) – Panel on “*Cybersecurity + Functional Safety + Compliance*” at the ArmoraProof Phase 0 – Executive Demo & Technical Panel, organized by BitArmora Technologies, Mysuru, held at ibis styles Mysuru.