# ICADT-2025: Preconference Workshop on Ethical Hacking Tools and Techniques

(25, October, 2025, Saturday)

In today's digital landscape, where cyber threats continue to evolve at an unprecedented pace, understanding the fundamentals of cybersecurity is not just important but it has become essential. This workshop aims to provide participants with a practical and structured overview of Ethical Hacking, focusing on key tools and methodologies used to assess and strengthen the security posture of systems and networks.

## **Topics:**

- Security Standards and Regulations: FISMA, HIPAA, PCI DSS, ISO 27000
- Ethical Hacking Lifecycle
- Reconnaissance Tools: WHOIS, Google Hacking, Job Sites, Social Media
- Scanning Tools: Nmap, OWASP ZAP
- Exploitation Tool: Metasploit
- Track Covering Tool: Clearev
- Open Source Intelligence (OSINT) : Shodan

#### **RESOURCE PERSONS:**



Ms. Harshitha Vijay Cybersecurity Analyst, Fortrea, Bangalore

Harshitha Vijay is a passionate Cybersecurity Analyst with expertise in threat detection, vulnerability assessment, and penetration testing. She is currently upskilling in the field of cloud security to address emerging cyber risks. Harshitha actively contributes to training programs and cyber awareness workshops. She has delivered sessions across Karnataka and Tamil Nadu through FDPs, FEPs, and student workshops.



Dr. Mangayarkarasi R, Vellore Institute of Technology, Vellore

Dr. Mangayarkarasi Ramaiah is a Professor at the School of Computer Science Engineering and Information Systems, VIT, Vellore. She specializes in developing cyber-attack detection and mitigation models using artificial intelligence. Her areas of expertise also include vulnerability assessment, penetration testing, computer vision, image processing, and machine learning. Currently, she is focusing on Internet of Vehicles (IoV) security to tackle emerging cyber threats in connected systems.

### TARGET AUDIENCE

- Students, Faculty members and Researchers
- Young researchers and scientists from Science and Technology (S&T) Organizations
- Young IT Professionals, Industry and Govt.

## **Workshop Coordinators:**

- 1. Dr. Mangayarkarasi R , 9245262611
- 2. Dr. Vanmathi C, 9894612210
- 3. Dr. Hemalatha S
- 4. Dr. Kamalakannan J
- 5. Dr. Balalii E