







# A Report on a Five-Day National Level Online Faculty Development Programme on "Innovative Applications of Artificial Intelligence in Cyber-Security" Organized by Department of Computer Applications from 17.03.2025 to 21.03.2025



Report Submitted by: Dr. K. Nirmala Devi, Assistant Professor, Department of Computer Applications and Dr. K. Radhika, Assistant Professor, Department of Computer Applications.

Time: 10.00 AM to 6.00 PM Mode of Conduct: Online

**Total Number of Participants: 235** 

# Report Received on 28.03.2025.

# **Breakdown of Participants:**

Professors : 17
Associate Professors : 06
Assistant Professors : 68
Research Scholars : 24
Industry Professionals : 01
Students from different states : 115
Others : 04

A Five-day National-Level Online Faculty Development Program was successfully conducted from 17th to 21st March 2025, organized by the Department of Computer Applications, Madanapalle Institute of Technology & Science (MITS), the program brought together 235 participants.

The Inaugural Session commenced with a welcome speech by Ms. Roopa Prasad, Assistant Professor, who emphasized the growing role of AI in strengthening Cyber-Security frameworks. This was followed by a presidential address given by Dr. R. Kalpana, Vice Principal – PG Programmes, who highlighted the importance of Faculty Development Programs in keeping educators updated with emerging technological trends. Dr. N. Naveen Kumar, Co-Chair of the program, presented a comprehensive report on the FDP, detailing its objectives. Dr. K. Radhika, Assistant Professor, Department of Computer Applications, introduced the Resource Person, Dr. Balakumar Pitchai, Director, Research Training and Publications, PMIST, Trichy.

The technical sessions provided a comprehensive exploration of the latest advancements in AI, including Machine Learning, Natural Language processing, and their applications in Cyber-Security. Each session was delivered by an expert in their respective field, enhancing the knowledge and capacity building of participants in AI and Cyber-Security

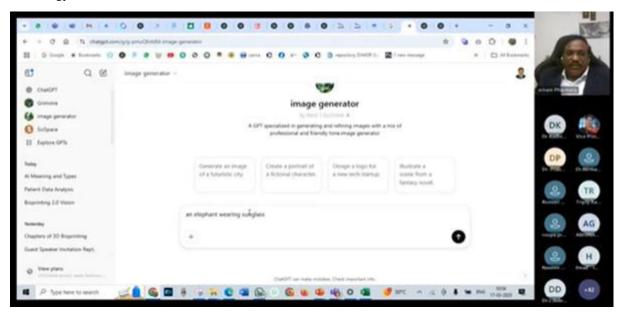
## **DAY WISE REPORT**

Day 1: Monday, 17th March 2025

Session: 1: Time: From 10:30 AM To 12:30 PM Topic: Introduction to Artificial Intelligence

Resource Person: Dr. N. Sriram, Managing Director, Genesis Research LAB Hyderabad.

Dr. N. Sriram delivered a foundational understanding of Artificial Intelligence (AI), covering its history, evolution, and fundamental concepts. The speaker emphasized how AI is transforming various industries and discussed real-world applications in healthcare, finance, and automation. Participants were shared their perspectives on AI's role in modern technology.

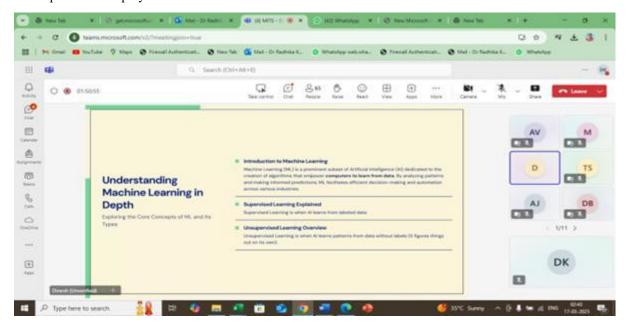


Session: 2 Time: From 2:00 PM To 4:00 PM

**Topic: Tools and Techniques of Artificial Intelligence** 

Resource Person: Mr. Dinesh Kumar, AI Technical lead, Accenture, Chennai.

Mr. Dinesh Kumar explained the essential tools and techniques of AI, such as Machine Learning, Deep Learning, Natural Language Processing (NLP), computer vision hands-on examples and demonstrations, showcasing real-world applications of these techniques. Participants gained insights into frameworks like enhancing their understanding of AI model development and deployment.



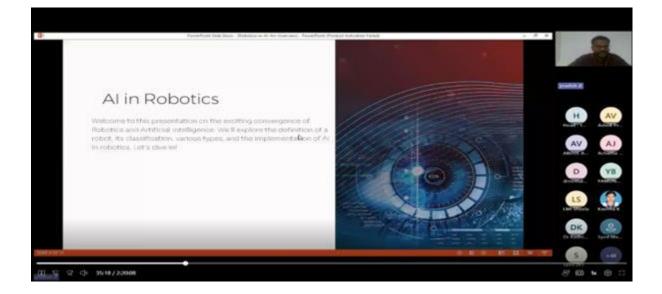
Day 2: Tuesday, 18th March 2025

Session: 3: Time: From 10:30 AM To 12:30 PM

**Topic: Robotics in Artificial Intelligence** 

Resource Person: Mr. D. Pradish, Robotics Engineer, Prag Robotics

Mr. D. Pradish focused on the integration of AI in robotics, on autonomous systems, Robotic Process Automation (RPA), and real-world applications in manufacturing and healthcare industry. The resource person explained Case studies highlighted how AI-powered robots are improving efficiency and precision across industries.

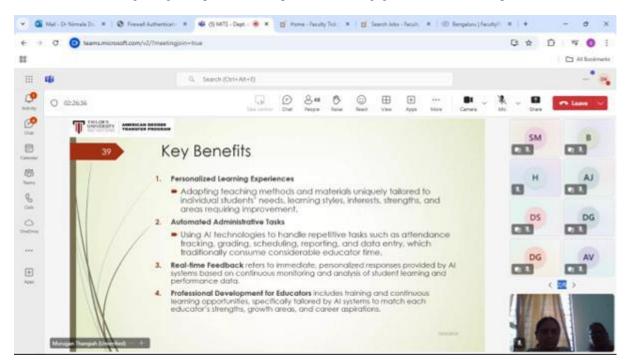


Session: 4: Time: From 2:00 PM To 4:00 PM

**Topic: Empowering Educators with Artificial Intelligence** 

Resource Person: Dr. Murugan Thangiah, Senior Lecturer, Taylors University Malaysia

Dr. Murugan Thangiah emphasized the role of AI in education, particularly in enhancing teaching methodologies, automating assessments, and developing personalized learning experiences.AI-driven tools such as intelligent tutoring systems and virtual assistants, recognizing their potential to improve student engagement and academic performance.



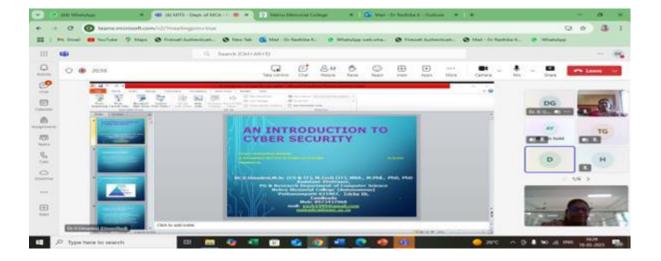
Day 3: Wednesday, 19th March 2025

Session: 5: Time: From 10:30 AM To 12:30 PM

**Topic: Introduction to Cyber-Security** 

Resource Person: Dr. K. Uma Devi, Nehru Memorial College, Trichy

Dr. K. Uma Devi spoke on the overview of key Cyber-Security concepts, including data protection, network security, and ethical hacking. The session covered the significance of Cyber-Security in the digital era and introduced fundamental security principles such as confidentiality, integrity, and availability.

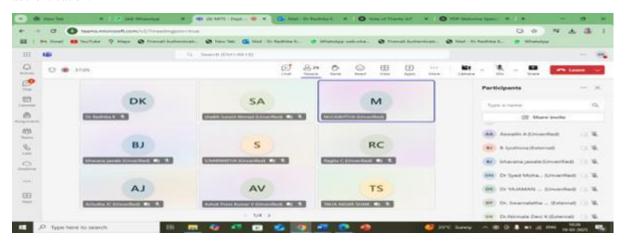


Session: 6: Time: From 4:00 PM To 6:00 PM

**Topic: Cyber-Security Threats and Protection Mechanisms** 

Resource Person: Dr. S. Rajasekaran, Registrar, University of Technology and Applied Science Oman

Dr. S. Rajasekaran delivered the lecture on Cyber-Security threats, including malware, phishing, and denial-of-service (DoS) attacks. The speaker provided practical insights into security measures, such as firewalls, encryption, and multi-factor authentication.



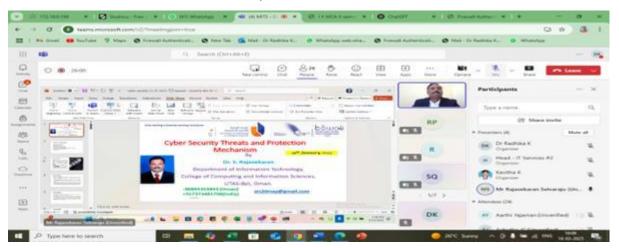
Day 4: Thursday, 20th March 2025

Session: 7: Time: From 10:30 AM To 12:30 PM

**Topic: Cybersecurity in IoT** 

Resource Person: Dr. M. G. Kavitha, Associate Professor and Head, Anna University, Pattukottai.

Dr. M. G. Kavitha Delivered a talk on the security challenges ionthe Internet of Things (IoT), including vulnerabilities in connected devices and data privacy risks. Experts discussed best practices for securing IoT ecosystems through encryption, device authentication, and intrusion detection systems.

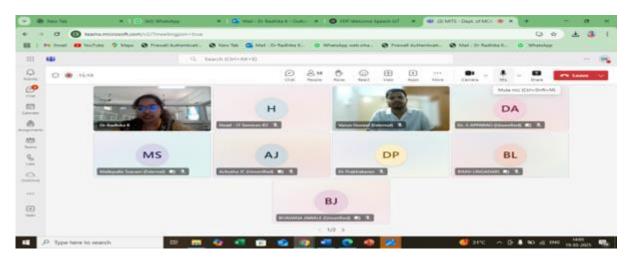


Session: 8: Time: From 2:00 PM To 4:00 PM

**Topic: Security in strength Event Management** 

Resource Person: Mr. Varun Govind, TCS Consultancy Services, Bangalore

Mr. Varun Govind discussed Security in Strength Event Management, covered the role of Cyber-Security in large-scale events, focusing on risk assessment, incident response, and data protection. Case studies of Cyber-Security breaches in high-profile events were analyzed, and best practices for ensuring digital security were shared.



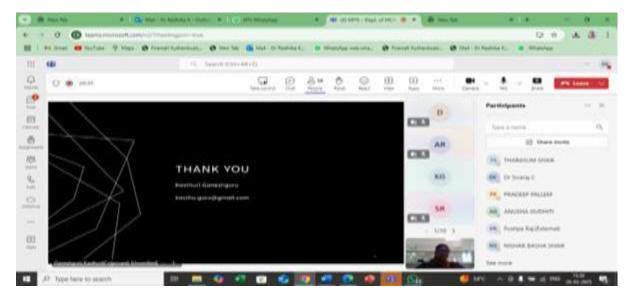
Day 5: Friday, 21th March 2025

Session: 9: Time: From 10:30 AM To 12:30 PM

**Topic: Role of Cyber-Security** 

Resource Person: Ms. Kasturi Ganeshguru, CTS, Chennai

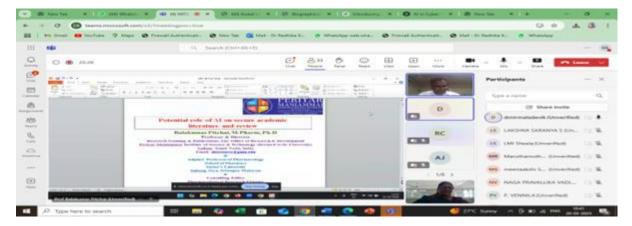
Ms. Kasturi Ganesh Guru delivered a presentation on the importance of Cyber-Security in safeguarding AI applications. Discussions revolved around securing AI models, protecting against adversarial attacks, and ensuring data privacy. The speaker also addressed regulatory frameworks and ethical considerations in AI security.



Session: 10: Time: From 2:00 PM To 4.00 PM

Topic: Potential Role of Secure Academic Literature Search and Review Resource Person: Dr. Balakumar Pitchai, Director Research, PMIST, Trichy

The final session demonstrated how AI can be leveraged for academic research, particularly in literature search and review by Dr. Balakumar Pitchai. AI-driven tools such as semantic search engines, plagiarism detection software, and research paper summarization tools were discussed. The session concluded with an interactive discussion on how AI can enhance academic integrity and streamline scholarly work.



#### Feedback on the FDP

The participants given their positive feedback on all the sessions, describing it as informative and Knowledgeable. Day-wise feedback was collected throughout the program, reflecting participants appreciation for the structured sessions, expert insights, and practical applications of AI in Cyber-Security. The final session on AI-driven Cyber-Security solutions was especially well-received, with participants valuing the comprehensive coverage of AI topics and the expertise of the resource persons. The FDP successfully met its objective of enhancing participants knowledge and skills in AI and its applications.

## **Valedictory Session**

The valedictory began with a **welcome address by Dr. K. Nirmala Devi-** Convenor. The event was dignified by **Dr. P. Ramanathan, Vice Principal (Academics), Dr. R. Kalpana, Vice Principal (PG Programs), and Dr. N. Naveen Kumar, <b>Professor, HoD-Department of Computer Applications.** They shared their comprehensions on the significance of AI and Cyber-Security in today's technological landscape, commending the efforts of the organizers, resource persons, and participants for making the FDP a valuable learning experience.

Dr. K. Radhika, Co-Convenor introduced the esteemed resource person, Dr. S. Rajasekaran, who proceeded to deliver a captivating and insightful talk. The resource person presentation explored the convergence of Artificial Intelligence and Cyber-Security, highlighting the latest trends, challenges, and innovative applications in this rapid world.

Dr. K. Nirmala Devi presented a closing summary report on the five-day program. The report discussed the latest developments in Artificial Intelligence (AI) and its importance in Cyber-Security. The session highlighted what participants learned from the sessions, including AI-driven security solutions. The report also stressed the need for continuous learning in the rapidly changing digital world.

The Faculty Development Program (FDP) drew to a close with a reflective session, where participants shared their experiences and insights gathered from the Five-Day FDP program. The enthusiastic participation and engaging discussions that characterized the sessions were duly acknowledged by faculty members and resource persons.

This was followed by the certificate distribution ceremony, where participants were awarded certificates of successful completion in recognition of their active participation and learning.

Ms. R. Sandhya, a first-year MCA student, delivered the vote of thanks, expressing heartfelt gratitude to the resource persons, participants, and Dr. A. Althaf Ali, Assistant Professor and Head IT Services, technical support team for their invaluable contributions to the program's success.

## **Program Outcome:**

The Faculty Development Program (FDP) successfully accomplished its primary objective of augmenting participants' knowledge and skills in Artificial Intelligence (AI) and its applications in Cyber-Security. The FDP program enabled participants to acquire a deeper understanding of the subject matter, fostering a community of educators equipped to impart expertise in AI-driven Cyber-Security solutions.

The organizers extend their sincere appreciation to the esteemed resource persons, enthusiastic participants, and dedicated technical support team, whose collective efforts contributed significantly to the program's success.