

### Guest Lecture: Machine Learning & Deep Learning concepts with Real-world Examples

The Department of Computer Science and Engineering organised a Guest Lecture titled "Machine Learning & Deep Learning concepts with real world examples" on December 13th 2025, at 10:00 AM to 12:30 PM in Smt. Rajalakshmi Jayaraman Seminar Hall. The event aimed to enhance students' understanding of Machine Learning, a subset of Artificial Intelligence (AI) that enables systems to learn from data and improve over time without being explicitly programmed. It is revolutionising industries by enabling automation, personalisation, and predictive analytics.

The lecture was delivered by Mr Rohit Prakash, who is working on Android Application Development, Integrating & Creating an AI & ML Model with 10+ years of experience and currently working at Cognizant Technology Solutions.

#### **Event Overview**

The session commenced with a warm welcome and the introduction of the guest speaker. Further Mr.Rohit Prakash began by exploring the core theme — "Machine Learning & Deep Learning concepts with real world examples." He explained the core AI/ML concepts, the distinction between machine learning and deep learning, various techniques, and illustrative applications in everyday life.

The event included:

- Introduction to AI, ML, and DL: A foundational explanation of how Machine Learning (ML) is a subset of Artificial Intelligence (AI), and Deep Learning (DL) is a specialised subset of ML using neural networks to mimic the human brain's learning process.
- Core Concepts and Techniques: An overview of the main learning methodologies:
  - Supervised Learning
  - Unsupervised Learning
  - Semi-Supervised Learning
  - Reinforcement Learning
- The Role of Deep Learning: A discussion of how deep neural networks, with their multiple hidden layers, automate the feature extraction process and are suited for handling larger, more complex datasets, such as images, audio, and video.



- Real-World Examples & Case Studies: The event emphasises practical applications, which often include:
  - > Image Recognition
  - Natural Language Processing (NLP)
  - > Recommendation Systems
  - ➤ Finance & Security
  - Autonomous Systems

The lecture was highly interactive, with students actively engaging in discussions and asking insightful questions about the use of Machine learning and Deep learning Applications. 208 students attended the event.

**Student Co-ordinators** from IIIrd sem: Vaishnavi P Rajesh, Vaishnavi Paranji Srirama, Yashwanth Sai T, Mohammed Sahif

### Report by:

Prof.Arfa Bhandari Prof.Syeda

Shafia Sadaf

Faculty Members, Department of Computer Science and Engineering, MVJ College of Engineering





Figure 1: Felicitation to Guest



Figure 2: Coordinating Team





Figure 3: Lecture