



J.B. INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Accredited by NBA&NAAC, Approved by AICTE & Permanently Affiliated to JNTU H Hyderabad)
Yenkapally (Vi), Moinabad (M). P.O. Himayat Nagar, RR District, Hyderabad 500075

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Guest Lecture on Machine Learning for IOT Applications

Date 21/03/2025

CIRCULAR

This is to inform all the II& III Year students that the Department of Computer Science and Engineering, JBIET is organizing a Guest Lecture on “**Machine Learning for IOT Applications**” on **28/03/2025**. All the students are here by informed to utilize this opportunity and must attend the session.

HOD-CSE



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Report on

Machine Learning for IOT Applications

Introduction

A guest lecture on **Machine Learning for IOT Applications** was organized on 28/03/2025 by the **Department of Computer Science and Engineering** as part of its academic enrichment activities. The session was delivered by **Dr.M.Venkata Krishna Reddy** Assistant Professor from CBIT Gandipet, Hyderabad, to provide students with in-depth knowledge about the convergence of two transformative technologies: the Internet of Things (IoT) and Machine Learning (ML). The objective of the lecture was to expose students to the latest developments, challenges, and opportunities in applying ML techniques to IoT-enabled systems.

- **Topic:** Machine Learning for IOT Applications
- **Date:** 28/03/2025
- **Speaker:** Dr.M.Venkata Krishna Reddy Assistant Professor from CBIT Gandipet, Hyderabad
- **No of Participants:** 85 Students

1. Overview of IoT and Machine Learning

- The speaker began with a clear introduction to IoT, its ecosystem, and the growing significance of connected devices in everyday life.
- He/she highlighted how machine learning empowers IoT systems by enabling devices to learn from data, recognize patterns, and make intelligent decisions.

2. Applications of Machine Learning in IoT

- **Smart Homes & Cities:** Energy optimization, traffic management, and smart surveillance.
- **Healthcare:** Remote patient monitoring, disease prediction, and wearable device intelligence.
- **Industry 4.0:** Predictive maintenance, supply chain optimization, and automated quality checks.
- **Agriculture:** Precision farming, crop disease detection, and resource management.

3. Techniques and Tools Discussed

- Supervised, unsupervised, and reinforcement learning approaches in IoT systems.
- Use of lightweight ML algorithms suitable for IoT devices with limited computational power.
- Introduction to tools and platforms like TensorFlow Lite, Edge AI, and cloud-based ML integration.

4. Challenges in ML for IoT

- Data security and privacy concerns.
- Scalability and handling large volumes of streaming data.
- Balancing accuracy and efficiency on resource-constrained IoT devices.

5. Future Trends

- Edge computing and on-device learning.
- AIoT (Artificial Intelligence + IoT) as a driver of next-generation smart applications.
- Integration of 5G technology for real-time decision-making.

Outcome of the Lecture

- Students gained **knowledge of integrating Machine Learning with IoT** for building intelligent systems.
- Understood **real-world applications** such as smart cities, healthcare, agriculture, and industry automation.

Conclusion

The guest lecture on “**Machine Learning for IoT Applications**” was a great success. It provided participants with a deeper understanding of how ML enhances IoT systems and prepares them for futuristic innovations. The lecture broadened students’ perspectives on interdisciplinary applications and motivated them to explore projects and research in this dynamic area. T

The department expressed gratitude to the resource person for sharing valuable insights and to all participants for making the event fruitful.

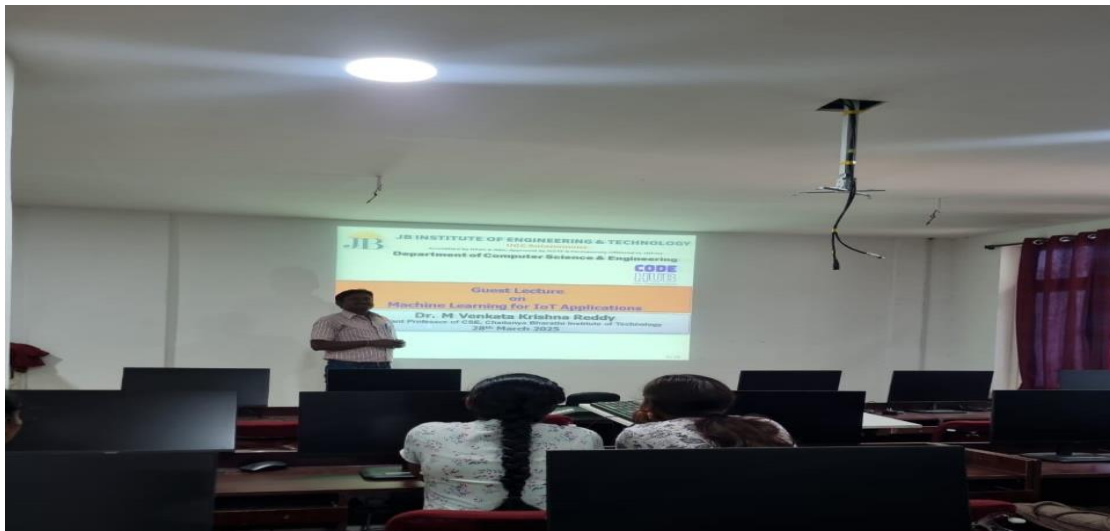


Fig-1 Dr.M.Venkata Krishna Reddy is delivering the Session to the students

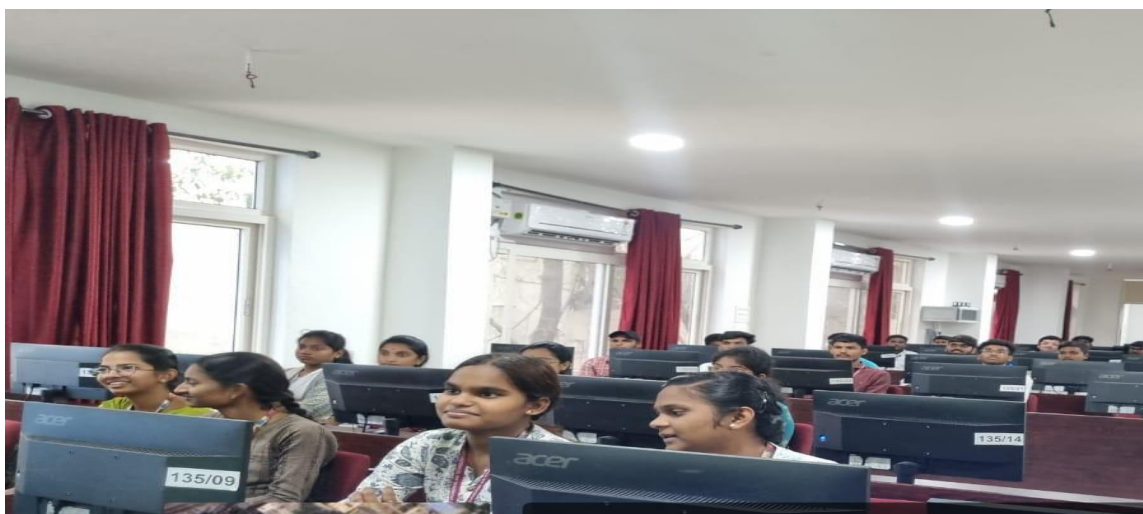


Fig-2 Dr.M.Venkata Krishna Reddy is delivering the Session to the students.

ATTENANCE

Sl.No.	Roll No.	Name of the Student
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7	23671A0507	BAGARI NIKHIL
8	23671A0508	BAKKANI VAISHNAVI
9	23671A0509	BASHABOINA SWATHI
10	23671A0510	BHAVANI GUMDAL
11	23671A0511	BHUKYA AKASH
12	23671A0512	BOJJA AKSHITH
13	23671A0513	BOLGAM MAHESH BABU
14	23671A0514	CH PRADEEP
15	23671A0515	CHENNARAM BHARATHSIMHA REDDY
16	23671A0516	DARPALLY OMKAR REDDY
17	23671A0517	DASARI JATHIN KUMAR
18	23671A0518	DHANAVATH SRI NAIK
19	23671A0519	DHARAM ABHISHEK
20	23671A0520	GUDLA AKSHAYA
21	23671A0521	J SAI VAMSHI VARDHAN
22	23671A0522	K SHIVA

23	23671A0523	K.NISHANTH
24	23671A0524	KAMARAJU SHASHI KIRAN
25	23671A0525	KAMMARI NITHISH KUMAR
26	23671A0526	PANTAM UDAY KIRAN YADAV
27	23671A0527	KURNAPALLY VAISHNAV
28	23671A0528	M PRASHANTH KUMAR
29	23671A0529	MADHAVANENI SRIJANITH
30	23671A0530	MANDAGIRI VANAJA
31	23671A0531	MANGELA SHIVAGANESH
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33	23671A0533	MUDAVATH MUKESH
34	23671A0534	MUNJALA SIRIHASINI
35	23671A0535	MYAKALA RETHWIK
36	23671A0536	NANDIGAMA SHIVA KUMAR
37	23671A0537	NENAVATH PAVAN KUMAR
38	23671A0538	PAMARTHI GNANESHWARI
39	23671A0539	POODARI PRATHYUSHA
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42	23671A0542	RAMIDI MONISH REDDY
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44	23671A0544	SAKSHI YADAV
45	23671A0545	SHAIK SOHAIL AZAIN ABDUL RAFIK
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71	22671A0512	DORTHALI ESHWAR
72	22671A0513	ELDONDA PREETHI
73	22671A0514	GADDAMEDDI SRIJA
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75	22671A0518	GELLU YASHWANTH
76	22671A0519	GUNNALA KRITISH
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79	22671A0533	MANNEM TEJASWINI
80	22671A0534	MAREDDY LAKSHMI
81	22671A0535	MOHAMMAD SAQUIB JAMAL
82	22671A0555	YADALA KALYAN
83	22671A0556	YENNU KEERTHANA
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