









# A Report on 6 Days FDP "Deep Learning And GEN AI Applications"

### **Collaborating Institute : IIT Roorkee**

Place : Mobile Application and Design Lab, New building First floor, KSIT

Date of FDP: 20th January to 25th January 2025

Faculty attended : From CSE, ECE, AIML, CSD and IOT Departments

Total no of staffs: 60

Department of Computer Science and Engineering under Computer Society of India (CSI) association with (IIC) Institution Innovation Council in association with IIT Roorkee, B.N.M Institute of Technology organized 6 days FDP on "Deep Learning And GEN AI Applications" from 20<sup>th</sup> January to 25<sup>th</sup> January 2025,K.S Institute of Technology being one of the SPOC center.

# **Objectives:**

- 1. To enrich faculty with strong knowledge on Deep learning frameworks and Gen AI,
- 2. To motivate to build highly sophisticated AI systems with advanced capabilities.
- **3.** To provide valuable insight on advancements in research through applications in solving various complex problems with high accuracy across various domains.

### Day 1:20 January 2025

Speaker :Dr Sandeep Singh Sandha Founder, ML0.AI Seatle, United States<br/>Dr Girish G N Assistant Professor IIIT Dharwad<br/>Dr Krishna Kant Director, Delhi Technical Campus Greater Noida

Inauguration of FDP was held at BNMIT college at 9.30 p.m.All the registered faculty attended the inauguration. Session was started with introduction to LLMS with Handson. Inauguration was done at KSIT college at 2.00 p.m. Session also concentrated on basics of Deep Learning and DL for medical Image Analysis and solutions.



## Day 2:21 January 2025

Speaker :Dr Jagriti Saini, ETERNAL RESTEM ChandigarhDr Sunil C K Assistant Professor IIIT Dharwad Amity UniversityDr Madura Prakash Senior Technical Leader Forus Health Pvt Ltd

Session focused on CNN Fundamentals, Hands on :Animal Image Segmentation. Speaker explained Brain Tumor Detection using Deep learning with python code. Session gave insights on case study using Yolo Model for Object Detection. Applications related to Deep Learning for Medical Image Segmentation and Classification was discussed.



### Day3 : 22 January 2025

Speaker : Dr.Amit Doegar NITTR Chandigarh Dr V Susheela Devi Principal Research Scientist IISC,Bangalore Dr Shwetha NIT Kurukshethra Dr Dinesh Naik Assistant Professor NITK ,Suratkal Session started with deep learning architecture needed for plant leaf disease detection. It continued with many case studies for DL architecture. Session also concentrated on perceptron layer for malware detetion. It ended with topic related to comprehensive region based semantic composition for the Image and video.



Day4 : 23 January 2025

Speaker :Dr Jagriti Saini ETERNAL RESTEM Chandigarh<br/>Dr Raghuram Bhardwaj Assistant Professor IIIT Bangalore<br/>Shreehari Shastry M L Technical expert Bosch Global Software

Session focussed on introduction to NLP and Preprocessing Techniques. Faculty was exposed to Hands-on on Generative AI and Reinforcement Learning. Session gave valuable insights on Speech recognition and NLU in automotive systems.



### Day 5 : 24 January 2025

Speaker:Mr. Abishek R Senior Data Scientist Ernst & Young Global Ltd<br/>Prof Sathya Narayan Research Scholar NITK Suratkal<br/>Dr Jagriti Saini ETERNAL RESTEM Chandigarh<br/>Mr Sivaraman Arumugam Associate Director, Verizon

Session gave experience on LLM's Deep Dive Hands on.It also focussed on case study on Generative AI with NLP.It gave deeper knowledge on NLP for Sentimental Analysis-Case study with real world dataset.



#### Day 6 : 25 January 2025

#### Speaker : Dr Sweeti Sah Assistant Professor NIT Kurukshetra Dr Jagriti Saini ETERNAL RESTEM Chandigarh

Session concentrated on Autoencoder and forecasting using deep learning techniques. It also focussed on case study of NLP-Hate speech Detection. Session ended with quiz and valedictory.

EO#	EVENT OUTCOMES
EO1	Gain practical skills in building, training, and deploying GEN AI models for technical proficiency.
EO2	Master the ability to identify and solve real-world business problems using Deep Learning technologies, from automating tasks to providing predictive analytics.
EO3	Understand how to apply AI solutions across various sectors, such as healthcare, finance, and retail, and tailor AI strategies to specific business needs.

#### **EO-PO/PSO mapping**

EO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
EO1	3	-	-	-	3	2	-	-	2	-	-	3	2	2
EO2	3	-	-		3	2	-	-	2	-	-	3	2	2
EO3	3	-	-	(4)	3	2	-	-	2	-	-	3	2	2
	3				3	2			2	-		3	2	2

**Faculty coordinator** 

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