# A Faculty Development Program

on

Innovations in Machine Learning, Artificial Intelligence, Data Science and Modelling

[16 Dec - 23 Dec, 2024]

under the aegis of

Electronics & ICT Academy
IIT Roorkee







## Supported by

Ministry of Electronics & Information

Technology

Government of India

**Experts from Academia/Industry** 

Certificates to participants by E&ICT
Academy IIT Roorkee

Hybrid Mode: Vignan's Foundation for Science, Technology & Research (Deemed to be University), Guntur Andhra Pradesh

#### Why this course?

The course explores cutting-edge innovations in Machine Learning, Artificial Intelligence (AI), Data Science, and Modeling, equipping participants with the knowledge to tackle real-world challenges. It bridges theoretical understanding and practical applications, empowering professionals to harness AI and data-driven techniques for problemsolving, predictive analytics, and decision-making across industries. This transformative program ensures participants stay ahead in a rapidly evolving technological landscape.

#### Objectives of the course

- Understand the latest advancements in Machine Learning and AI.
- Develop expertise in data analysis and predictive modeling.
- Explore applications of AI and ML in real-world scenarios.
- Gain hands-on experience with advanced tools and frameworks.
- Build robust models for accurate predictions and insights.
- Foster innovation by integrating AI into diverse domains.
- Enhance critical thinking and problem-solving skills through data science.

#### **Course Features**

- 40 Hours of Lectures & Hands-on (Hybrid Mode)
- Lectures from Expert Speakers, Hands-on from industry experts
- Access to learning material and video lectures
- Certificate by E&ICT Academy IIT Roorkee

#### Focus Area

- Deep learning and neural network advancements.
- Natural language processing (NLP) and computer vision.
- Big data analysis and visualization techniques.
- Ethical considerations and biases in AI.
- Reinforcement learning and generative AI models.
- Applications in healthcare, finance, and other key industries.
- Deployment and optimization of machine learning models.

#### Prerequisites

• No experience is required, but fundamental knowledge of any programming language would be helpful

Conference Code: EICTIITR-FDP-24-13

### **Principal Investigator**

Prof. Sanjeev Manhas E&ICT Academy, IIT Roorkee

### **Course Coordinators**

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- Dr. Goli Srinivasa Rao, Department of Mathematics & Statistics, School of Applied Sciences & Humanities, Vignan's Foundation for Science, Technology & Research, Vadlamudi, Guntur, Andhra Pradesh

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#### **DISTINGUISHED SPEAKERS**



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