



# Electronics & ICT Academy IIT Roorkee



An Initiative of
Ministry of Electronics
& Information
Technology (MeitY)
Government of India

# A Faculty Development Program

# ML Applications for Academic and Industrial Research

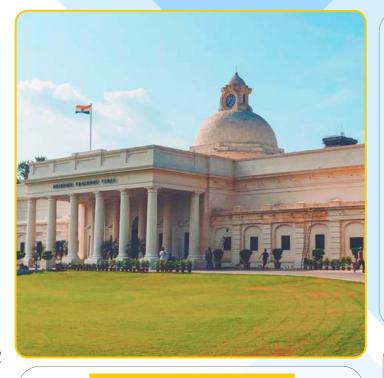
In association with

CMR Engineering College, Hyderabad

Feb 21 - Feb 25, 2025 Register Before: Feb 19, 2025



Venue: Hybrid Mode: CMR Engineering College, Hyderabad



# Why this course?

The FDP on ML Applications for Academic and Industrial Research equips participants with a comprehensive understanding of machine learning principles and their diverse applications. This course emphasizes practical exposure and hands-on experience in domains such as healthcare, social media, forensics, and more. Designed to foster innovation, it bridges the gap between academic knowledge and real-world challenges. By exploring cutting-edge ML techniques and tools, participants gain the skills to conduct impactful research and develop solutions for complex industrial and societal problems.

#### **Prerequisites**

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

## Objectives of the course

- Introduce foundational concepts and algorithms of machine learning.
- Explore the application of ML techniques in various academic and industrial domains.
- Provide insights into supervised and unsupervised learning models.
- Enhance practical understanding through hands-on lab sessions.
- Discuss the role of ML in healthcare, forensics, and social media analytics.
- Equip participants with tools for real-time ML model development and cloud deployment.
- Foster innovation and research capabilities in ML applications.

#### **Focus Areas**

- Core ML algorithms and their research perspectives.
- Application of ML in healthcare, social media, and forensics.
- Supervised and unsupervised learning methodologies.
- Real-time data processing and classification using ML.
- Practical implementation of ML in cloud environments.
- Development and deployment of ML models for academic research.
- Emerging ML tools and techniques for industrial applications.

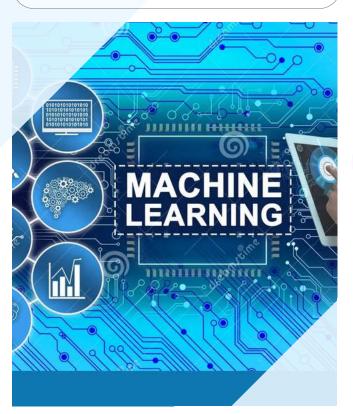
#### **Course Features**

- 40 Hours of Lectures, hands-on, and Pedagogy/Industry sessions.
- Lectures from Expert Speakers, Hands-on from industry/Academia experts.
- · Access to learning material and video lectures
- Certificate by E&ICT Academy IIT Roorkee

#### **Course Outcomes**

Participants are likely to:

- Develop a deep understanding of ML principles and techniques.
- Apply ML models to solve real-world problems across domains.
- Gain hands-on expertise in Python programming for ML.
- Design and implement supervised and unsupervised learning models.
- Build and deploy ML models in cloud and real-time environments.
- Enhance teaching and research skills in machine learning.
- Contribute to innovation in both academic and industrial research with ML applications.



#### **Experts from Academia/Industry**

# Who Should Register?

Any Interested Faculty/PhD-Scholars UG/PG/ & Industry Persons can register

# **Registration Fee**

Fees: ₹ 250/- Faculty/Research Scholar/
Students
₹ 500/- Industry/Others
Note: Refund will be done in case of course cancellation only, with in 20 working days

FDP Kits & Refreshment will be provided

# How to make Payment

Please make the payment first using the below link upload the payment receipt when filling out the Google registration form

https://eict.iitr.ac.in/instruction-for-payment/

Conference Code: EICTITR-FDP-25-23

# **Registration Link**

https://forms.gle/UuNcudEWKsgphrd18



Scan QR for registration

Register before: Feb 19, 2025

Click to follow us on:







#### Who may benifits

- Academic Faculty and Students(UG/PG)
- Government Officials.
- Working Professionals in the Industry and Startups.
- Reasearch Scientists and Technical Staff.



This certificate can be considered in alignment with other Quality Improvement Programs (QIP) as well as NBA and NAAC for recognition/credit.

## **Principal Investigator**

Prof. Sanjeev Manhas ECE Department, IIT Roorkee

#### **Course Coordinators**

- Prof. Sanjeev Manhas, IIT Roorkee
- Dr. M. Kumara Swamy CMR Engineering College, Hyderabad
- Dr. C. Syamsundar, CMR Engineering College, Hyderabad

#### Reach Us:

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