

# Electronics & ICT Academy IIT Roorkee



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

# A Faculty Development Program

# **Recent Advances in Deep Learning**

In association with

# NETAJI SUBHASH ENGINEERING COLLEGE, WEST BENGAL

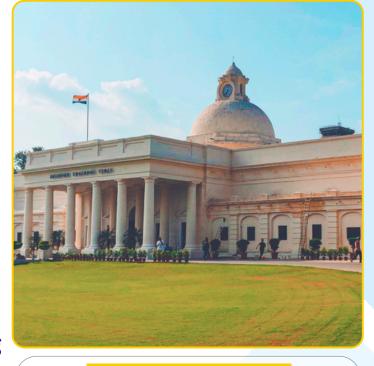
Feb 05 - Feb 14, 2025

(02:30 PM to 05:00 PM & 6:30 PM to 9:00 PM)

Register Before: Feb 03, 2025



Venue: Hybrid Mode: ECE Dept. NETAJI SUBHASH ENGINEERING COLLEGE, WEST BENGAL



# Why this course?

Deep learning has revolutionized modern AI, enabling advancements in neural networks, computer vision, NLP, and more. This FDP focuses on recent advances in deep learning, including quantum neural networks and pedagogical techniques. With expert lectures from top institutions and hands-on Python programming sessions, participants will gain cutting-edge knowledge and practical skills to tackle real-world challenges in deep learning research and applications.

#### **Prerequisites**

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

### Objectives of the course

- To understand the fundamentals and advanced concepts in deep learning.
- To explore architectures like CNN, LSTM, GRU, and quantum neural networks.
- To gain hands-on experience in Python programming for neural networks.
- To understand the optimization techniques in neural networks.
- To explore recent advancements in neural network architectures.
- To enhance teaching methodologies for deep learning concepts.

#### **Focus Areas**

- Fundamentals of deep learning and optimization techniques.
- Convolutional and deep neural network architectures.
- Quantum neural networks and their applications.
- Advanced architectures like LSTM and GRU networks.
- Hands-on Python programming for neural networks.
- Pedagogical methods for teaching deep learning.
- Industry insights on deep learning 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:

- Comprehensive understanding of deep learning fundamentals and advancements.
- Practical skills in implementing neural networks using Python.
- Knowledge of quantum neural networks and their emerging role in AI.
- Ability to design and optimize advanced neural network architectures.
- Insight into state-of-the-art applications of deep learning.
- Enhanced teaching approaches for deep learning topics.
- Preparedness for industry and academic challenges in AI and deep learning.



#### **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: EICTIITR-FDP-25-16

#### **Registration Link**

https://forms.gle/KWKnLRxhEn9GDs1T7



Scan QR for registration

Register before: Feb 03, 2025

Click below icons 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. Swagata Roy Chatterjee,
   Department of ECE, Netaji Subhash
   Engineering College, West Bengal

### **Spoke Centre Coordinators**

- 1.Dr. Manash Chanda, Meghnad Saha Institute of Technology, Uchhepota Kolkata
- 2.Dr. Swagata Paul, Techno International New Town, Kolkata

#### Reach Us:

M.No.: 8112766397

**Example 2** Landline No.: +91-1332286457

Email: eict@iitr.ac.in