Organized by **Electronics & ICT Academy**



MNIT Jaipur http://www.mnit.ac.in/eict

Online Programme

Optimization for Deep Learning **Models**

30 June 2025 - 4th July 2025

Faculty Development Programme

Electronics & ICT Academy under aegis of



meity.gov.in/content/schemes-projects

Chairman, EICT Academy & **Director MNIT Jaipur**

Prof. Narayana Prasad Padhy

Chief Investigator, EICT Academy Prof. Vineet Sahula, ECE

Coordinator, EICT Academy Dr. Satyasai Jagannath Nanda, ECE

Co- Chief Investigators, EICT Academy Prof. Lava Bhargava, ECE Prof. Pilli Emmanuel Shubhakar, CSE Dr. Ravi Kumar Maddila, ECE

Objective (Electronics & ICT Academy-Ph)

conduct specialized **FDPs** faculty/mentor training in line with the vision of MeitY by promoting emerging areas of technology and other high-priority areas that are pillars of both the "Make in India" and the "Digital India" programs.

2) To promote synergy and collaboration with industry, academia, universities and other institutions of learning, especially in emerging technology areas.

3) To support the National Policy on Electronics 2019 (NPE 2019) which envisions positioning India as a global hub for ESDM sector, including MeitY Schemes/policies such as Programme for Semiconductors and Display Fab Ecosystem; India AI; National Programme on AI, Production Linked Incentive Scheme for IT Hardware & Large-Scale Electronics Manufacturing; EMC; SPECS; Chips to System (C2S); etc.

4) To promote standardization of FDPs through Joint Faculty Development

Programmes.

5) To support the vision of the National Education Policy (NEP 2020), which mandates that Indian educators go through at least 50 hours professional development in programmes per year.

6) To design, develop & deliver specialised FDPs on emerging technologies/ niche areas/ specialised modules for specific research areas for Faculty in Higher Education Institutions (HEI), besides FDPs on multidisciplinary areas connected with ICT tools and technologies and other digital hybrid domains, covering a wide spectrum of engineering and non-engineering colleges, polytechnics, ITIs, and PGT educators.

An intensive 40 Hours Training Programme in online mode is being organized for faculty and doctoral students of engineering and technological institutions. It is also open to working professionals from industry/organizations. The main theme of training program will be oriented around exploring the state of the art of Optimization for Deep Learning Models. The programme will be run during 30 June 2025 to 4 July 2025 for 5 days.

Programme Modules

Module 1: Foundations of Training Mechanisms of Deep Neural Networks: Introduction to Optimization Deep Learning, Loss Surface Challenges, Impact of Different Optimizers, Hyperparameter Tuning, Hands-On

Module 2: Techniques for Training Neural Networks Effectively:

Weight Initialization Strategies, Activation Function Roles, Learning Rate Schedulers, Second Order Optimization, Hands-On

Module 3: Building Robust and Compress Models:

Overfitting causes and detection, Dropout, Weight Decay, Early Stopping, Model Compression, Transfer Learning, Hands-On

Module 4: Advance Neural Network Architectures:

Recurrent Neural Network, Convolutional Neural Network, Graph Neural Network, Long Short Term Memory, Hands-On

Module 5: Text Intelligence: Language Models and Transformer Architectures:

Text Classification and Sentimental Analysis. Language Modeling and Embeddings, Transformers (Encoder-Decoder), Hands-On

Experts/Speakers:

Experts and speakers will be from Academia (IITs / NITs or **CFTIs) and Top Industries**

Principal Coordinator:

Dr. Priyanka Harjule

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9785069289

Registration:

Registration is industry graduate first-come, first-Register online



open to faculty, working professionals, persons, doctoral, postgraduate students. Participants will be admitted on a served basis.

(http://online.mnit.ac.in/eict/)

Certification Fee:

From Academia (faculty/Students): Rs. 500/-

Working professionals, Industry, research/technical staff & Others: 1500/-

- (A) Fee once paid will not be refunded back.
- (B) The fee covers online participation in the programme, tutorial notes and examination, certification charges.
- (C) The organizers should receive the registration amount through online mode-NEFT/UPI, provided at the registration portal.
- (D) Detailed schedule will be shared after receiving registration form.
- → For any other query, email us at fdp.academy@mnit.ac.in

MNIT Jaipur one of the oldest NITs, the institute has a rich heritage of sixty years producing world class engineers, managers, architects and scientists. Ranked 43rd nationally in the NIRF ranking-2024 (Engineering), the institute offers learning opportunities for undergraduate, postgraduate students, and researchers in various domains. Having a lush green campus of over 317 acres within the heart of the pink city, close to Jaipur International Airport, the campus offers a safe and lively environment. A world class teaching infrastructure, state-of-art laboratories welcome you at the campus. The institute has a vision to impart education of international standards and conduct research at the cutting edge of technology.