

Electronics & ICT Academy

IIT Roorkee

One Week Short Course/FDP

on

" Deep Learning and its Applications"

Recognized by AICTE at par with QIP for recognition/credits



August 20-24, 2019

Experts from Academia/Industry

- Dr. Balasubramanian, CSE Dept, IITR
- Dr. Partha Pratim Roy, CSE Dept, IITR
- Dr. Saumik Bhattacharya, ECE Dept, IITR
- Dr. Biplab Banerjee, CSE Dept, IITB
- Dr. Anupama Ray, IBM Bangalore
- Dr. Ritu Garg, INTEL Bangalore

Certificates to participants by E&ICT Academy IIT Roorkee

Supported by

Ministry of Electronics & Information Technology Government of India



Venue

E&ICT Academy(N-321), ECE Department, Indian Institute of Technology Roorkee

Why Deep learning?

Deep learning is a method of data analysis that automates analytical model building. Deep learning techniques are becoming ever necessary due to various factors like growing volumes and varieties of available data, computational processing that is cheaper and more powerful, and affordable data storage. Deep learning methods build quick and automatically producing models that can analyze bigger, more complex data and deliver faster, more accurate results on a very large scale. This analysis process further facilitates organizations in identifying profitable opportunities and avoiding unknown risks.

Objective of the Course

- Introduction of deep learning and its real-life applications.
- Understanding of shallow and deep architecture.
- Understanding of neural network and sequential modeling.

Benefits and Outcomes of the Course

- The program would help the participants to understand the key concepts behind deep learning.
- Participants would be able to learn how to build deep learning that is adaptable to any environment in real life.
- Hands-on experience in hyper parameter tuning and regularization practice, minibatch gradient descent, autoencoders, convolution neural network application using tensorflow and keras.

Focus Areas

- Introduction to Deep Learning and Artificial Neural Networks (ANNs), Perceptrons, Multilayer perceptron.
- Regularization, Hyperparameter Tuning and Autoencoders.
- Convolutional Networks–Basic architecture of a CNN, Variants of the Basic Convolution Model, Evolution of CNN Architectures – AlexNet, ResNet and other architectures.
- Sequence Modeling–Recurrent and Recursive Nets – Unfolding Computational Graphs, Recurrent Neural Networks, The Long Short-Term Memory and Other Gated RNNs.
- Applications of Deep Learning.

Program Features

- The program is split into lectures and labs/hands-on sessions.
- Hands-on experience on basic and advanced-level topics.
- Interaction & learning with experts from academia & industry.
- Certificates to participants by E&ICT Academy IIT Roorkee.



Coordinator

- Dr. Sanjeev Manhas PI, E&ICT Academy IIT Roorkee
- Dr. P.P. Roy, Local Coordinator, E&ICT Academy IIT Roorkee
- Dr. Balasubramanian, Local Coordinator E&ICT Academy IIT Roorkee

Who Can Attend ?

Program is open to faculty members/research scholars/PG students from colleges/universities, and industry personnel working in the concerned/allied discipline.

Registration Fee

Faculty members: ₹ 1000/-

Research scholars: ₹ 1000/-

Persons from Industry: ₹ 1,500/-

How to make payment

Offline: DD in favor of "Dean SRIC IIT Roorkee" payable at Roorkee
"OR"

Online: (<https://www.onlinesbi.com/prelogin/icollecthome.htm?corpID=365641>)

Read the instruction for payment before filling the online registration form.

How to Apply

Step 1: Make Payment

Step 2: Participants may fill registration form through Academy website (<http://eict.iitr.ac.in>).
OR

Step 2: Send a duly filled-in registration form along with Demand Draft to Academy address.

Mr. Prateek Sharma, EICT Academy, ECE Department, IIT Roorkee-247667

Important Dates

**Last Date For
Registration :
July 31, 2019**

EICT Academy IITR

Electronics and ICT Academy (E&ICT) at IIT Roorkee (funded by Ministry of Electronics and Information Technology) aims to enrich and upgrade teaching and research competences of engineering faculties of institutes/colleges by conducting courses and workshops in fundamentals as well as emerging areas of E&ICT and enabled areas. The programs are conducted by well-known industry partners, resource persons from leading academia and experts from renowned R&D organizations.



Activities of the Academy

- Specialized training on basic and advanced level topics with hands-on experience in the emerging areas of Electronics & ICT.
- Setup the activity centers to conduct one-week short course/FDPs locally at institutes/colleges.
- Curriculum development for the industry.
- Continuing Education Programme for students/working professionals.
- Design, develop and delivery of specialized modules for specific research areas in industry.

One Week Short Course/FDP on Deep Learning and its Applications



Dates: August 20-24, 2019

REGISTRATION FORM

Applicant Name _____

Gender: _____

Category (GEN/OBC/SC/ST): _____

Designation: _____

Name and Address of the
Organization/Institute: _____

City/Town: _____

Email: _____

Phone Number: _____

Do you need Accommodation?
(Yes/No): _____

DD Number: _____

Date: _____

Issuing Bank: _____

Payable at: _____

Signature of the Applicant

Contact Us

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