



# ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON Deep Learning and AI Applications (28<sup>th</sup> August – 8<sup>th</sup> September 2021)



Organized by  
**E & ICT Academy, National Institute of Technology, Warangal.**

In Association with

**G. Narayanamma Institute of Technology and Science (for Women) Shaikpet, Hyderabad**

(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

## Preamble:

"Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, GoI. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. This academy's role is to offer Faculty Development Programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

## About the FDP:

The Faculty Development Programme will help to disseminate the knowledge in the domain of data science and Machine learning. It empowers the participants to understand how data science can be used to innovate and improve the business process. Machine Learning is a fast-growing field of Artificial Intelligence concerned with the study and design of computer algorithms for learning good representations of data, at multiple levels of abstraction. Since data is overwhelming, organizations are struggling to extract the powerful insights they need to make smarter business decisions. The participants will be trained with hands-on approach in order to have an in-depth insight into the domain of Data Sciences and expose them to Feasibility & future scope

## Major Course Contents:

1. Introduction to Artificial Intelligence, Machine Learning, Deep Learning and Representation Learning
2. Machine Learning with Feature Representation
3. Machine Learning Basics – Linear Regression, Perceptron's, Multilayer Perceptron's, Stochastic Gradient Descent, Backpropagation
4. Deep Learning Regularization Techniques: L1, L2, Noise Injection, Data Augmentation, Dropout, Ensemble, Parameter Sharing, etc.
5. Basics of TensorFlow/Keras/PyTorch/Python
6. CNN Architecture and Advanced Models
7. Object detection RCN and FRCNN
8. Recommendation Systems, BERT
9. Computer Vision Applications: Image Classification, Object Recognition and detection using TensorFlow
10. RNN Architecture and LSTM, Google Colab
11. Natural Language Processing(NLP) Applications : Machine Translation using TensorFlow/PyTorch
12. Current Research – Latest Architectures, Applications

## Faculty conducting this programme:

The programme will be conducted by the faculty members from NIT Warangal; Academicians in the concerned field from IITs/NITs/IIITs are invited to deliver lectures in the programme. Speakers from industries are also expected to deliver as part of the course.

## Registration Fee Particulars:

<b>Faculty and Research Scholars</b>	<b>Rs.750/-</b>
<b>Industry Participants</b>	<b>Rs.2250/-</b>

Participants need to pay the Registration Fee Online using the

following details

## Online Transfer Details

Account Name: <b>Electronics &amp; ICT Academy NITW</b>
Account No: <b>62423775910</b>
IFSC: <b>SBIN0020149</b>
Bank and Branch: <b>State Bank of India, NIT (REC) Warangal</b>

## How to apply:

Participants are required to fill the online registration form by clicking on the following link:

[https://docs.google.com/forms/d/1SUEKVy3O\\_bJm-PB8L4SRcIPVWPkyzWa416T9ZathAwA/edit](https://docs.google.com/forms/d/1SUEKVy3O_bJm-PB8L4SRcIPVWPkyzWa416T9ZathAwA/edit)

## Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 60 (sixty). Additionally, 10 participants from industry are allowed to participate. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

## Important Dates:

<b>Last date (Application &amp; DD)</b>	<b>26.08.2021</b>
<b>Selection List by E- mail</b>	<b>27.08.2021</b>
<b>Duration</b>	<b>28.08.2021 to 08.09.2021</b>

## About NIT Warangal:

National Institute of Technology, Warangal is the first among 17 RECs setup as joint venture of the Government of India and the state government. Over the years the college has established itself as a premier Institute imparting technical education of a very high standard leading to the B.Tech degrees in various branches of engineering, M.Tech. and Ph.D programmes in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

## About GNITS:

G. Narayanamma Institute of Technology & Science (GNITS), Hyderabad, a leading Engineering college for women, was founded by late Mr G. Pulla Reddy in 1997, with an objective to provide quality education in Engineering. GNITS received UGC Autonomous status for 10 years from 2018 and is affiliated to JNTU-H, Hyderabad with accreditation from NAAC, NBA and ISO certified. GNITS offers 8 B.Tech and 5 M.Tech programmes with 2640 students enrolled in B.Tech. stream and 180 in M.Tech stream. First college in India to establish Apple Lab inaugurated by Tim Cook. Its excellent infrastructure provides opportunity for students to excel and secure placements in top MNC's on par with NITs, IIITs and IITs.

## About CSE:

The Department of CSE offers two new programmes under B. Tech CSE with specialization in AI & ML and Data Science. The department has 8 doctorates and 24 pursuing Ph.D from reputed universities. Two research centres are established one on IoT and another for AI & ML with AICTE-MODROB funds. quality research papers and 5 patents are published by the faculty. 95% of eligible students from CSE are placed in top MNC's with the highest pay package of 45 lakhs.



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## Deep Learning and AI Applications

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1. Name :

2. Designation :

3. Institution :

4. Email :

5. Mobile No :

6.

Reference No:
Amount:
Bank :
Date:

7. Address for Correspondence:

8. Educational Qualification:

9. Subjects taught so far:

10. No. of refresher courses/workshops attended:

11. Experience (in years):

Teaching: Research: Industry:

12. Do you belong to SC/ST : YES /NO

Dr. /Mr. /Ms. .... is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on "Deep Learning and AI Applications", sponsored by Electronics & ICT Academy during 28<sup>th</sup> August – 8<sup>th</sup> September, 2021 at G.Narayanamma Institute of Technology and Science, Hyderabad.

Institution Signature of Head of  
(with seal)

### Convenor/Advisory Member

**Dr M Seetha Prof and Head CSE**

#### Address for correspondence

Post your application form to  
Head Department of CSE  
G Narayanamma Institute of Technology and Science,  
Shaikpet, Hyderabad, Telangana, INDIA-500104  
It is requested of all the delegates, after completion of application form and the payment details, screenshot of payment and scanned application form has to be uploaded in the following online registration link.  
[https://docs.google.com/forms/d/1SUEKVy3O\\_bJm-PB8L4SRcIPVWPkyzWa416T9ZathAWA/edit](https://docs.google.com/forms/d/1SUEKVy3O_bJm-PB8L4SRcIPVWPkyzWa416T9ZathAWA/edit)

#### Registration Link:

For more details about Electronics & ICT Academy, NIT, Warangal, please visit:  
<https://nitw.ac.in/eict>

#### For more enquiries please contact co ordinators:

**Dr. N. Kalyani, Mrs Y Sravani Devi**  
**Designation: Professor, Assistant Professor**  
**Mobile: 9948391000, 9703787555**  
**Email : fdp.eict@gmail.com**  
**CC to : fdp.cse@gnits.ac.in**

#### Declaration

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

Date

Signature of the Applicant

### SPONSORSHIP CERTIFICATE

## Coordinators

### Dr. M. Srinivas

Ph.D. (IITH), Post-Doc (Academia Sinica, Taiwan and ETS, Canada)  
Computer Science and Engineering  
NATIONAL INSTITUTE OF TECHNOLOGY  
WARANGAL – 506 004 (Telangana State)  
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### Dr. N. Kalyani

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