



# Online Short-Term Course on Deep Learning Algorithms and Applications in Engineering and Sciences

Organized by  
Department of CSE NIT Warangal & Department of CSE-AI & ML SNIST  
In association with the



Center for Continuing Education, National Institute of Technology Warangal  
28<sup>th</sup> November 2022-3<sup>rd</sup> December 2022

## About NIT Warangal

National Institute of Technology Warangal, formerly known as Regional Engineering College was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 13 Departments offering eight undergraduate and 32 post-graduate programmes besides doctoral programmes. About 5000 students across the country and about 500 international students study in the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure, state of the art library, seminar halls guest house and laboratory.



## About Center for Continuing Education

The Center for Continuing Education NIT Warangal organizes FDPs/Training programmes/Seminars/Workshops etc., in the frontier areas of Science, Engineering, Technology, Management, Humanities, Social Science and Socially relevant themes on self-financing basis in three different modes: (i) At NIT Warangal (ii) At NIT Warangal in collaboration with other organizations/Engineering Colleges / Institutes (iii) By NIT Warangal Faculty at the Host Organization/Institute

## About Department of Computer Science & Engg NITW

The Department of Computer Science and Engineering (CSE) offers B. Tech course in CSE, M. Tech courses in CSE, Information Security (IS) and Master of Computer Applications (MCA). The Department has experienced faculty with good publications and well-established laboratories. The Department has liaison with reputed industries and R&D organizations like Microsoft, IBM, Oracle, Accenture, Infosys, TCS, EMC2, C-DAC, Motorola, NIC, Sun Micro Systems, SPSS and tie up with IISc in certain areas. Department conducts various sponsored programmes like GIAN, International and national conferences throughout the year.

## Sreenidhi Institute of Science and Technology, Hyderabad.

Sreenidhi Institute of Science and Technology (SNIST), Hyderabad, Telangana 501301 is a non-profit organization founded by a group of Industrialists, Academicians, Professionals and non-resident Indians with an idea of imparting purposeful education to youth. SNIST which is being sponsored by Sree Educational Group was established in the year 1997 by Dr. K.T. Mahhe, an extraordinary educationist, a pragmatic leader and a dynamic entrepreneur with rich experience in Academics and Industry with the permission of AICTE, New Delhi and the Government of Andhra Pradesh. The Institute offers 11 UG (B. Tech.) and 9 PG (M. Tech. and MBA) programs. SNIST is striving hard to empower the students in their technical knowledge and imbibe adequate skills through the teaching by eminent faculty. The present annual intake of the institute is 1836. The institution has been accredited by NAAC with A+ grade and NBA, New Delhi. This year SNIST is celebrating its 25<sup>th</sup> year (Silver Jubilee). department specialties include Industry Internship projects, highly qualified and experienced faculty members.



## Department of CSE-AI & ML

Department of CSE – AI & ML is established in 2021 with a view of providing quality education in professional core and multi-disciplinary areas. The UG intake is 180. Department of CSE – AI & ML is strong in research activity especially in the areas like Data Analytics / Information Security / AI / ML / IOT / Deep learning etc. The Department has 1 Ph.D. holder and 3 faculty pursuing Ph.D. The department is allied department of CSE which is accredited by NBA-AICTE and NAAC. The Department periodically organizes sponsored FDP/STTP. This department faculty worked earlier from CSE Department and

all these have more than 15years of experience and the CSE department started from 1997. Department has received various research funded projects.

### About STC:

Deep learning is an important element of data science, which includes statistics and predictive modeling. It is extremely beneficial to data scientists who are tasked with collecting, analyzing and interpreting large amounts of data; deep learning makes this process faster and easier. Deep learning technology has been used for analyzing medical images in various fields, and it shows excellent performance in various applications such as segmentation and registration. Deep learning models can interpret medical images like MRI scan, CT scan, etc., to perform diagnosis. The algorithms can detect any risk and flag anomalies in the medical images. Deep learning is extensively used in detecting cancer. IDP leverages a deep learning network known as CNN (Convolution Neural Networks) to learn patterns that naturally occur in photos. The various applications of deep learning algorithms in agriculture are leaf classification, plant disease identification, yield approximation, weed detection, weather prediction, and soil moisture prediction. In smart agriculture, deep learning algorithms are used to monitor the temperature and water level of the crops. Deep learning models use learned patterns and results of document processing to assess credit risks and loan requests. The outcomes of the program were as follows:

- Understand fundamentals of Deep Learning.
- Knowledge on Various tools to implement Deep Learning concepts
- Configure and install Deep learning tools
- Introduce Deep learning concepts in to the curriculum of UG and PG programs
- It helps in analyzing the data as well as identifying trends

### Major Course Contents

- Introduction to Machine Learning
- Introduction to Deep Learning
- Machine Learning Vs. Deep Learning and Their applications
- Recurrent Neural Networks
- Tools: Matlab, PyTorch, Tensor Flow
- Deep Belief networks
- Auto encoders

The Sessions will be handled by the experts from IITs/NITs/IITs Central University/Software Industry.

### How to Apply

Interested candidates can apply online by clicking below link

<https://forms.gle/U3A2Er8D6Xd72Kt87>

Join in WhatsApp Group: <https://chat.whatsapp.com/FYFZwJbb9t3Imd5klXq1BD>

Participants details need to be filled and payment details uploaded by using above link in Google Forms on or before **23<sup>th</sup>Nov 2022**.

### Who should Attend?

The Programme is open to all Faculty/Research Scholars/ Industry Professionals/MCA/MBA/Degree/Polytechnic and other eligible students can register the course.

### Bank Account Details

Account Name:	CCE NITW
BANK NAME :	SBI
ACCOUNT NO :	62403680215
IFSC CODE :	SBIN0020149
BRANCH :	NIT WARANGAL

### Registration Fee:

Faculty: **500(Five Hundred only).**

Industry Professionals:**1000(Thousand only).**

Foreigners: **50 USD.**

### Important Dates:

Last Date (Application &DD): **23<sup>th</sup>Nov 2022**

Selection List (by e-mail): **25<sup>th</sup> Nov 2022**

Duration: **28<sup>th</sup>Nov 2022 to 3<sup>rd</sup> Dec2022**

**Confirmation mails will be sent two days before the Programme.**

**Once Paid/Registered your are Confirmed**

The interested individuals may register on the **FCFS** basis the seats are limited to **200** only

### Coordinators:

**Dr. T V RAJINI KANTH**

Professor & Head

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