

One Week Online Short Term Course (STC)
on
**Applications of Deep Learning and Machine Learning in Emerging Areas of
Engineering, Science & Business**

(1st to 5th August 2022)

Organised by
Center for Continuing Education, NIT-WARANGAL

In association with
**DEPARTMENT OF INFORMATION TECHNOLOGY
SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, HYDERABAD**



Center for Continuing Education, NIT- WARANGAL:

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 financial basis in three different modes at NIT Warangal, at NIT Warangal in collaboration with other organizations and by NIT Warangal Faculty at the Host Organization/Institute.

About STC:

Deep Learning is a part of Machine Learning used to solve complex problems and build intelligent solutions. The core concept of Deep Learning has been derived from the structure and function of the human brain. Deep Learning uses artificial neural networks to analyze data and make predictions. ML refers to an AI system that can self-learn based on the algorithm. Systems that get smarter and smarter over time without human intervention is ML. Most AI work involves ML because intelligent behaviour requires considerable knowledge. Machine Learning (ML) techniques provides a set of tools that can automatically detect patterns in data which can then be utilized for predictions and for developing models. Developments in ML algorithms and computational capabilities have now made it possible to scale engineering analysis, decision making and design rapidly.

This, Short term course aims to provide a broad overview on Machine Learning & Deep learning fundamentals, Algorithms and Various Applications in emerging areas of Engineering, Science & Business .The Programme has been planned with Eminent speakers from Industry and Academics for the benefit of Faculty, Industry persons, Scholars and Post graduates

The outcomes of the program were as follows:

- ✦ Understand fundamentals of Machine Learning with its applications.
- ✦ Understand the key concepts behind Machine learning.
- ✦ Design deep learning algorithms which are more appropriate for various types of learning
- ✦ Design various Neural Network models such as Convolutional Neural Network and Recurrent Neural Network
- ✦ Awareness on various engineering, science and business applications of ML and DL

Major Course Contents:

- ✦ Introduction to Machine Learning and Deep Learning
- ✦ Supervised and Unsupervised Learning methods
- ✦ Partitioned and Hierarchical Clustering methods
- ✦ Bayesian Learning , Decision Tree classification methods
- ✦ Dimensionality Reduction Methods, SVM Classification
- ✦ Reinforcement Learning

- ✦ Neural Networks, Generative Adversial Networks
- ✦ CNN,RNN
- ✦ Deep Reinforcement Learning
- ✦ Engineering Science and Business Applications of Machine Learning
- ✦ Engineering Science and Business Applications of Deep Learning

Faculty Conducting this Program:

The programme will be conducted and organized by the faculty members from NIT Warangal and SNIST, Hyderabad. Academicians in the concerned field from IITs/NITs/IIITs/Central/Deemed/State Universities are invited to deliver lectures in the programme. Experts from software industries are also expected to deliver as a part of the course.

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.

Sreenidhi Institute of Science and Technology, Hyderabad:

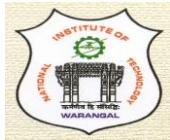
Sreenidhi Institute of Science and Technology (SNIST), Hyderabad, Telangana 501301 is a non-profit organization founded by a group of Industrialists, Academicians, Professionals and non-resident Indians with an idea of imparting purposeful education to youth. SNIST which is being sponsored by Sree Educational 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 25th year (Silver Jubilee).

Department of Information Technology, SNIST:

Department of Information Technology is established in 1997 with a view of providing quality education in professional core and multi-disciplinary areas. The UG intake is 240 apart from PG program (CNIS) with 24 seats . Department of IT is strong in research activity especially in the areas like Data Analytics/Information Security/AI/ML/IOT/Deep learning etc. The Department has 14 Ph.D. holders and 10 faculty pursuing Ph.D. The department has been accredited by NBA-AICTE and NAAC. The Department periodically organizes sponsored FDP/STTP. Department of IT has been recognized as Authorized Academy by PALO ALTO Networks by Cyber security.

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Name:	Registration Fee Particulars:
Designation:	Faculty/Research Scholars/Industry Participants/PG Students: INR 500
Institution:	Participants need to pay the Registration Fee Online using the following details
E-mail:	
Mobile No.:	Account Name: Center for Continuing Education (NITW) Account No: 62403680215; IFSC: SBIN0020149 Bank and Branch: State Bank of India, NIT (REC) Warangal
Reference No. (fee paid):	
Mode of Payment:	How to Apply: Participants are required to fill the online registration form by clicking on the following link: Step 1: Register for the STC: https://bit.ly/ITSTC or https://forms.gle/gqW2k4VwqKCR71K18 Step 2: Join in WhatsApp Group: https://bit.ly/STCGROUP
Amount paid:	
Name of the Bank:	
Educational Qualification:	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.
Subjects taught so far:	
Experience in Teaching: Research: Industry:	
Do you belong to SC/ST): Yes or No	
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 STC and shall attend the course for entire duration. I also undertake the responsibility of the course.	Important Dates: Last Date (Application &DD): 30 th July 2022 Selection List (by e-mail): 31 st July 2022 Duration: 1 st to 5 th August 2022
Signature of the Participant	Coordinators:
Sponsorship Certificate:	

Dr. /Mr. /Ms.
is an employee of our Institute/Organization and is hereby sponsored to participate in the ONLINE STC on "Applications of Deep Learning and Machine Learning in Emerging Areas of Engineering, Science & Business" sponsored by Center for Continuing Education NIT Warangal in association with Department of INFORMATION TECHNOLOGY, Sreenidhi Institute of Science and Technology, Hyderabad during 1st to 5th August 2022.

Signature of Head of the institution/Organization
(with seal)

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