JNTUH UNIVERSITY

Jawaharlal Nehru Technological University, the First Techno-logical University of India, was established on 2nd October 1972 in Andhra Pradesh with headquarters located in Hyderabad. The University is one of the premier Universities in India, accredited by NAAC with 'A' Grade. After successful and proven levels of appreciated existence and stature spanning over 36 years, JNTU has been divided into four different Universities by Govt. of Andhra Pradesh, through Act No.30, Dt. 24th September, 2008. JNTU Hyderabad is one among the four Universities. Its Constituent College, "JNTUH College of Engineering, Hyderabad" is regarded as a pioneer in Technical Education and is a flagship College of the University. Other constituent colleges of JNTUH are located at Jagityal, Sultanpur, Manthani and other academic units at Hyderabad campus.

JNTUH College of Engineering

The College was established as Nagarjuna Sagar Engineering College in 1965 by the Government of Telangana. When the college was under the administrative control of the Department of Technical Education, it was affiliated to Osmania University, Hyderabad. With the formation of Jawaharlal Nehru Technological University on 2nd October 1972, it became a constituent college of the University and was later renamed as JNTU College of Engineering, Hyderabad. From its inception in

1965 to 1984, the College was located at Masab Tank Campus. In 1984, the College was shifted to its permanent location at Kukatpally, a 100 acres site, about 20 km from the heart of the City, on Bombay National Highway (NH-9).

Directorate of University Industry Interaction Centre (D-UIIC)

JNTU Hyderabad has been a pioneer in promoting industry-academia interaction and the scope of the activities has been steadily growing. In this endeavour, JNTUH has established a Directorate of University Industry Interaction Centre (UIIC) in the year, 2009.

Industry interactions relating to Engineering and Technology, Basic and Applied Sciences, Pharmacy and Management come under the umbrella of University Industry Interaction Centre. The main focus of UIIC is to bridge the gap between Industry requirements and Academic delivery. The UIIC carries forward the interaction of University with the industrial bodies of Public, Private and Government sector organizations.

About MathWorks (I) Pvt. Ltd

MathWorks is the leading developer of mathematical computing software for engineers and scientists. Jack Little and Cleve Moler, the cofounders of MathWorks, recognized the need among engineers and scientists for more powerful and productive computation environments beyond those provided by languages such as Fortran and C. In response to that need, they combined their expertise in

mathematics, engineering, and computer science to develop MATLAB, a high-performance technical computing environment. MATLAB combines comprehensive math and graphics functions with a powerful high-level language.

In addition to MATLAB, MathWorks now develops and markets Simulink, a product for simulating nonlinear dynamic systems. The company also develops and markets an extensive set of add-on products for specialized application areas including control design, signal processing and communications, image processing, test and measurement, computational biology, and financial modeling and analysis.

Prerequisites:

- No Prior Knowledge of Machine Learning or Deep Learning is expected.
- Basic Understanding of Statistics and Linear Algebra is useful to have.
- Programming Fundamentals, Exposure to Programming in MATLAB is nice to have.

Who should attend?

• Practicing Engineers / Faculty

Agenda:

Day 1:

Introduction to Machine Learning and Neural Networks

- Data I/O and Basic Statistics / Curve Fitting
- Exploratory Data Analysis
- Introduction to AI / ML Terminology
- Machine Learning using MATLAB Classification and Regression
- Supervised and Unsupervised Models,

Shallow Neural Networks

Day 2:

Introduction to Deep Learning

- Introduction to Deep Learning Terminology
- Creating and Training a Deep Neural Network
- Modifying Hyper parameters and Network Tuning
- Transfer Learning
- Deep Learning for Images and Signals

Key Learning Outcome:

After attending this workshop, attendees should be able to:

- 1. Know what AI, Machine Learning, Data Science, and Deep Learning mean and how they are related to each other.
- 2. Understand and perform Machine Learning tasks using MATLAB.
- 3. Be exposed to Deep Learning, especially in image and signal analysis.
- 4. Apply Machine Learning / Deep Learning concepts using MathWorks MATLAB / Simulink to solve problems in different domains.

Chief Patron:

Sri JayeshRanjan , IAS I/c. Vice-Chancellor, JNTUH

Patron:

Dr. A. Govardhan, Rector & I/c. Registrar, JNTUH

Chairman:

Dr. E. Sai Baba Reddy, Principal, JNTUH CEH

Co-Chairman:

Dr.Ch.VenkataRamana Reddy, Director, UIIC, JNTUH

Registration Fee: There is no Registration Fee

Registration link and use Registration form given.

https://forms.gle/uNTzYrHZB3UJssTn6

Limited seats: Registration is on first come first serve basis. Selected participants will be informed through mail by 6thJanuary, 2020.

Last date for registration: 5th January, 2020.

Travel/Accommodation

Participants are required to make their own arrangements for travel, local conveyance and accommodation.

Address for Correspondence

Dr. M. MadhaviLatha

Professor

Department of ECE, JNTUH CEH

Cell: 9848506611, Email: mlmakkena@yahoo.com

Venue: Computer Lab, UIIC, JNTUH

Time: 10:00 AM to 5:00 PM

Registration form: Down Load

from **jntuh.ac.in**, **jntuhceh.ac.in** websites. (Given along with this brochure)

Resource Persons

Mr. Amith Kamath

Application Engineer

Email: akamath@mathworks.com

Mr. Praful P Pai

Application Engineer

Email: ppai@mathworks.com

A Two-Day Hands-on Faculty Development Program on

"Machine and Deep Learning"

7 - 8 January, 2020 (Under TEQIP-III, JNTUH)



In collaboration with UIIC, JNTUH and



Coordinator
Dr. M. MadhaviLatha
Professor in ECE
JNTUH College of Engineering
Hyderabad-500 085, Telangana.

Registration Form