

Workshop Schedule

Day	Time	Topic
Day-1 20-08-2024	02:00PM to 05:00PM	Introduction to Python Hands on - Basic of Python
Day-2 21-08-2024	02:00PM to 05:00PM	Introduction to Machine Learning Types of Machine Learning Building a Machine learning model
Day-3 22-08-2024	02:00PM to 05:00PM	Data Preprocessing Correlation analysis in Python
Day 4 23-08-2024	02:00PM to 05:00PM	Linear Regression Practical Implementation
Day 5 24-08-2024	10:00AM to 01:00PM	Introduction to Classification algorithms: Logistic Regression
Full day	02:00PM to 05:00PM	KNN, Comparison of all three models
Day 6 25-08-2024	10:00AM to 01:00PM	Simple Decision Trees, Plotting Decision tree in Python
Full day	02:00PM to 05:00PM	Random Forest, Plotting Random Forest in Python
Day 7 26-08-2024	10:00AM to 01:00PM	Open CV Library, Hands on
Full day	02:00PM to 05:00PM	SVM, Plotting SVM in Python Quiz followed by Feedback session
Day 8 27-08-2024	02:00PM to 05:00PM	K-means, Plotting K-Means in Python
Day 9 28-08-2024	02:00PM to 05:00PM	Time -series Analysis using Python
Day 10 29-08-2024	02:00PM to 06:00PM	Introduction to TensorFlow Implementing using TensorFlow Quiz followed by Feedback session

Workshop Objective

To leverage Python programming for developing and optimizing machine learning models, aiming to enhance data-driven decision-making and predictive accuracy. Focus on creating efficient algorithms, improving model performance, and solving complex problems through advanced analytical techniques and innovative solutions.

Workshop Outcomes

1. Develop and implement machine learning models using Python.
2. Clean and prepare datasets for effective model training.
3. Assess and fine-tune model performance with various techniques.
4. Visualize model results to facilitate understanding and decision-making.
5. Apply machine learning techniques to solve practical problems.

Organizers

CHIEF PATRON

Sri BURRA VENKATESHAM, IAS
VICE-CHANCELLOR I/C, JNTU HYDERABAD

PATRONS

Dr. K. VIJAYA KUMAR REDDY
Rector, JNTUH
Dr. K. VENKATESWARA RAO
Registrar, JNTUH

CHAIRMAN

Dr. B. PRABHAKAR
Head, Dept. of ECE, Principal, JNTUH UCEJ

COORDINATOR

Dr. B. SATEESH KUMAR
Professor & Head, Dept. of CSE.

ORGANIZING COMMITTEE

Dr. S. VISWANADHA RAJU Senior Professor, Dept. of CSE.
Sri M. UDAY KUMAR Associate Professor, Dept. of CSE.
Sri P. SREENIVASA RAO Associate Professor, Dept. of CSE.
Mr. O. RAJU Assistant Professor(C), Dept. of CSE.

STUDENT COORDINATORS

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY
HYDERABAD
UNIVERSITY COLLEGE OF ENGINEERING JAGTIAL
(Accredited by NAAC, A+ Grade)
(AUTONOMOUS)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

(Accredited by NBA, UG:CSE)

Organizes a
Ten Days Workshop
on



***“Machine Learning Using
Python Programming”***

Last Date for Registration
“18-08-2024”

Timings
“02:00 pm to 5:00 pm”

For more Details visit:
www.jntuhcej.ac.in

About JNTUH UCEJ

JNTUH University College of Engineering Jagtial (JNTUH UCEJ) was established in the year 2007 as a constituent college of Jawaharlal Nehru Technological University Hyderabad. The College was approved by AICTE, New Delhi and recognized by UGC under Section 2 (f) & 12 (B) of the UGC Act, 1956. JNTUHCEJ has received THE ENGINEERING EDUCATORS AWARD from the University of Bradford, UK and Education Matters for exemplary commitment and impactful positive contribution to the education sector on 8th February, 2014. The College was accredited by NAAC with A+ in 2022. The three UG Programs : such as CSE, EEE & ME offered by the college are accredited by NBA. The College was located in a serene and green environment with well equipped and state of the art laboratories in all the departments, The faculty are highly qualified and about 90% of them are Doctorates

Institution Vision

The aspiration is to emerge as a premier institution in technical education in producing professional and competent engineers capable of making valuable contributions in Engineering and Technology.

Institution Mission

The aspirations shall continue to fulfill □ With the support of diligent, assiduous, industrious, and highly qualified faculty.

- With state-of-art facilities for knowledge enrichment of students.
- Guiding and training students in conjunction with needs of industry

About The Department

The Department of Computer Science and Engineering was established in the year 2007. The Department offers UG and PG Programs. It was accredited by NBA for UG-CSE. The Department has been maintaining high standards in imparting quality education in Computer Science. The Department has state of the art infrastructure and computing equipment supported by high speed internet and wireless networks. The faculty in the department comprises of two Senior Professors, two Professors, two Associate Professors and three Assistant Professors (C). The Department faculty have more than 500 publications, filed more than 15 patents and undertaken more than 5 funded research projects. The thrust areas of research include Machine Learning, Artificial Intelligence, Image Processing, Real time operating Systems, Neural Networks, Data mining, Information retrieval and Web mining, Information Security, Networks, Operating Systems, Distributed Systems, Parallel processing and Human Computer Interaction.

Department Vision

The aspiration is to provide innovative centric professional education in Computer Science and Engineering.

Department Mission

The aspirations shall continue to fulfill:

- Imparting quality education through innovative teaching learning practices.
- To provide the state-of-the-art infrastructure and technology to suit academic and industry requirements
- Inspire and Motivate the students and staff to attain professional computing and research skills for the continuous improvement.

About Workshop

Machine Learning workshop using Python** is designed to provide participants with a comprehensive introduction to the field of machine learning, focusing on both theory and practical implementation. The workshop usually begins with an overview of machine learning, covering key concepts like supervised, unsupervised, and reinforcement learning, and demonstrating how these techniques are applied in various real-world scenarios. Participants are then introduced to Python, the preferred programming language for machine learning, with a focus on its syntax, data structures, and core libraries such as NumPy, pandas, and scikit-learn. The workshop emphasizes data handling and preprocessing, guiding participants through the process of loading datasets, cleaning data, and performing exploratory data analysis (EDA). This is crucial for understanding data patterns and making informed decisions when engineering features. The core of the workshop typically involves hands-on coding sessions where participants build and evaluate various machine learning models. These sessions might include creating regression models for predicting continuous outcomes or classification models for categorical predictions, and exploring unsupervised learning techniques like clustering and dimensionality reduction.

Registration link

https://docs.google.com/forms/d/e/1FAIpQLSdUQbCKMEPtRzLixKEkSnLXEazWzeeVQ2UwCINtd1ry3rkJg/viewform?usp=sf_link

Registration Fee : Rs 500/- to be paid to the students co-ordinator(P.Laxminivas,7601046778) at the time of submitting the online registration form