

FIVE DAY WORKSHOP ON ARTIFICIAL INTELLIGENCE AND DATA SCIENCES : THE FUTURE OF TECHNOLOGY

(04th March 2024-08th March 2024)

Timing: 9.30 AM to 4.30 PM

Organized by

**Department of Computer Science and Engineering
Tezpur University, Napaam, Assam, 784028**



About the Workshop

Artificial intelligence is frequently related to the development of cognitive abilities similar to those of humans, such as voice interpretation, game play, pattern recognition, etc. Artificially intelligent systems learn to do this by sifting through vast volumes of data and searching for patterns to use as models for their own judgement. An interdisciplinary field of data science deals with processes and systems that are used to extract knowledge or insights from large amounts of data. With advancements of so much data, many aspects of data science are gaining immense importance, especially big data.

The proposed workshop is intended to introduce faculty members, researchers, and post-graduate students to the fields of data science and artificial intelligence. The speakers will also include an overview of the tools used in data science and aim to equip the audience with the necessary knowledge to get the complete essence during the hands-on sessions. Industry personnel will deliver lectures on the applications of data science in healthcare, finance, marketing, and research. The workshop is expected to instill confidence among the participants in the emerging areas of data science and artificial intelligence with proper understanding and use of Python packages and libraries to effectively handle complex problems.

The workshop aims to provide a holistic understanding of **Artificial Intelligence & Data Science** and its applications in the industry.

About the University

Tezpur University was established by an Act of Parliament in 1994. The objects of this Central University as envisaged in the statutes are that it shall strive to offer employment oriented and interdisciplinary courses to meet the local and regional aspirations and the development needs of the state of Assam and also offer courses and promote research in areas which are of special and direct relevance to the region and in emerging areas in Science and Technology.

About the Department

The Department of Computer Science was started in July, 1994 under the school of Science and Technology. It was started with the object of promoting specialized knowledge in the field of Computer Science and Computer Application. In view of the worldwide shortage of

skilled manpower in the field of Information Technology, the Department strives to channelize talented youth of the region to this challenging and knowledge intensive field by imparting quality technical knowledge and skills in the field. The Department of Information Technology was started in July, 1997 under the school of Science and Technology. The Department of CS and the Department of IT was merged in 2004 and renamed as Department of CSE.

Vision

To be a dedicated center of learning and research in computer science and engineering for creating competent professionals capable of taking leading roles in industry, academia, entrepreneurship and application.

Mission

- To create a lively environment for the students and faculty for personal and professional growth with high ethical standards.
- To continuously upgrade the curriculum and laboratory facilities to train the students in the latest technology for better employability.
- To involve the students in individual as well as team projects for solving challenging problems in computer engineering and applications.
- To create a center of excellence on frontier areas of research.
- To facilitate consultancy work by the faculty for industry and the public sectors.

Programmes offered by the Department

- B. Tech in Computer Science and Engineering
- M. Tech in Information Technology
- M. Tech in Data Sciences (Starting from Autumn 2024)
- M. Tech in Computer Science and Engineering
- Master of Computer Application
- Ph.D in Computer Science and Engineering

Major Course Contents

- Probability and Statistics for Data Science
- Introduction to Artificial Intelligence
- Introduction to Data Science and Machine Learning
- Supervised, Unsupervised and Semi-Supervised Learning
- Python Environment, Setup and Essentials
- Exploratory Data Analysis
- Regression Techniques and Implementations
- Data Visualization Techniques
- Applied Machine Learning using Open-Source Tools
- Deep Learning & Reinforcement Learning
- Natural Language Processing
- IoT, Blockchain & industry 4.0
- 5G & Beyond in Machine Learning
- Social Network Analysis
- Case Studies on Data Science and Machine Learning
- Computer Vision and its Application in Self Driving Cars
- Explainable AI and Model Interpretability
- Generative AI
- Data Science Applications from Industry Perspective
- Recommender Systems
- Exploring AI's Impact: Real Industry Use Cases & Available Tools At Our Disposal

Faculty Conducting this Programme

The programme will be conducted by the faculty members from Tezpur University. Academicians in the concerned field from IITs/NITs/IIITs/IISERs/NISERs/Abroad are invited to deliver lectures in the programme along with speakers from industries.

Who Can Participate & Criteria of Selection

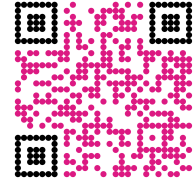
Registered PhD students, independent researchers, faculty members and post-graduate students of any recognized public and private universities from any field that requires some aspect of data analysis, artificial intelligence, and programming techniques to operate on data are eligible to participate in the workshop by registering themselves in. Industry personnel working in the concerned/allied discipline can also attend.

How to Apply

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

<https://forms.gle/C2y2hjuNKDGpbNF7>

Register latest by 5:00 PM on Feb 26, 2024. The details of the account to make the payment will be shared with the shortlisted candidates via email.



There are only 30 vacancies!

It is expected that there shall be many applicants for the workshop and the applications shall be shortlisted based on first-come-first-serve basis. The application process shall be closed once the required number of participants is fulfilled. Interested candidates are, therefore, encouraged to apply early and not wait till the last date. In case an applicant is shortlisted for the workshop he/she shall be informed through email by the coordinator of the workshop. Candidates selected for participation are encouraged to bring their own laptops for better understanding and smooth functioning of the hands-on sessions. Although individual computers will be provided to all participants. The workshop is to be organized in in-person mode. Resource persons will deliver their lectures in-person and/or virtual mode.

Registration Fee

Research Scholars and PG Students	Rs. 1000/-
Faculty	Rs. 1500/-
Industry Participants	Rs. 2500/-

The participants shall be provided with workshop kit, refreshments and decent working lunch during the workshop. Certificate of participation will be provided to participants who duly participate in all the sessions. No certificate shall be issued to the participant, if he/she remains absent in any of the sessions.

Venue: Seminar Hall & Data Science Laboratory, Dept. of CSE, Tezpur University

Accommodation: On demand for outstation participants (excluding travel expenses)

Important Dates

- **Application deadline:** Feb 26, 2024, at 5:00 PM or 30 applications, whichever earlier.
- **Notification of shortlisting:** Feb 27, 2024
- **Payment & confirmation of registration:** March 01, 2024
- **Workshop starts:** March 04, 2024
- **Workshop ends:** March 08, 2024

Address for Correspondence

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For more details, please visit: <https://www.tezu.ernet.in/newsfeeds.html>