About MNIT Jaipur:

The college was established in 1963 with the name as Malaviya Regional Engineering College, Jaipur as a joint venture of the Government of India and the Government of Rajasthan, Subsequently; on June 26, 2002 the college has been given the status of National Institute of Technology and on 15 August 2007, Proclaimed Institute of National Importance through Act of Parliament. The Institute is fully funded by Ministry of Education (Shiksha Mantralaya), Government of India. More than 12,000 students have already been graduated since its establishment.

Extending into an area of over 317 acres of lush greenery, the campus of the Institute is imaginatively laid-out with a picturesque landscape. It presents a spectacle of harmony in modern architecture, and natural beauty which enthralls and inspires.

The campus of the institute consisting of the institute buildings, halls of residence and staff colony. It is a residential campus offering accomodation to faculty, staff and students.

Contact Us

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Confirmation of Participation:

Upon receipt of the google form and fee remittance receipt, participants will be sent confirmation of their participation through email by 31st May, 2023. Candidates are advised to register at the earliest as the number of seats are limited.

Highlights of the Course:

- This short-term course will be conducted six hours a day (excluding breaks)
- Real life data will be used for analysis
- Problem solving by hand followed by use of Python
- The sessions will begin at 10 AM and conclude at 5 PM
- The majority of topics will be covered hands-on using Python.

Benefits:

- Participants will get hands-on experience on Data analytics
- Participants will develop an understanding of ML algorithms.
- All the ML algorithms will be hand solved for greater understanding and then later, will be applied on real data

SHORT TERM COURSE ON DATA DRIVEN ANALYTICS WITH MACHINE LEARNING

12– 16 JUNE, 2023

Coordinators

Prof. Rajesh Kumar (Dept. of Elect. Engg.)

Dr. Gunjan Soni (Dept. of Mech. Engg.)

Dr. Priyanka Harjule (Dept. of Mathematics)

Organized by

Department of Electrical, Mechanical Engineering and Mathematics, MNIT Jaipur

In association with the

Indian Institution of Industrial Engineering, Jaipur Chapter

Overview of the Short term course:

This short-term course aims at imparting skills in the area of artificial intelligence

Objectives:

- To introduce participant to the basic concepts and techniques of Data driven analytics
- To develop skills of using recent machine learning software for solving practical problems
- To gain experience in doing independent study and research.

About the course:

Data-driven analytics (with machine learning) refers to the process of using data to gain insights and make predictions or decisions with the help of machine learning algorithms. This involves analyzing large sets of data to identify patterns, trends, and relationships, and then using this information to train machine learning models.

Machine learning algorithms use statistical techniques to automatically learn from data and improve their performance over time. By applying these algorithms to large amounts of data, data-driven analytics can identify patterns and make predictions that would be difficult or impossible to discover through traditional analysis methods.

Examples of applications of data-driven analytics with machine learning include fraud detection, predictive maintenance, recommendation systems, image and speech recognition, and natural language processing. These techniques are used in a wide range of industries, including finance, healthcare, marketing, and manufacturing, to improve decision-making, optimize processes, and drive business outcomes.

Modules

1. *Data Collection:* The process of gathering and organizing relevant data from various sources, such as databases, social media, IoT devices, and other sources.
2. *Data Preprocessing*: This involves cleaning, filtering, transforming, and integrating data to ensure its quality and consistency, as well as to prepare it for analysis.
3. *Data Analysis:* This step involves applying statistical and machine learning techniques to identify patterns, relationships, and trends in the data.
4. *Model Development:* This involves using machine learning algorithms to build predictive models that can be used to make forecasts or generate insights.
5. *Model Evaluation:* This step involves testing and validating the performance of the predictive models against a set of evaluation metrics.
6. *Deployment*: The final step involves integrating the predictive models into a production environment, where they can be used to make decisions or generate insights.
7. *Visualization:* This step involves presenting the results of the analysis in a visually appealing and intuitive way, such as charts, graphs, dashboards, or reports.

These components are iterative and often require continuous improvement to refine and improve the accuracy of the analysis and predictions.

Resource Persons:

Faculty from different departments of NIT Jaipur and Industry will deliver lectures and conduct hands-on sessions.

Registration is open to:

Faculty members in all disciplines of Engineering, Sciences, Mathematics, Life sciences, Management, Post-Doctoral Fellows, Research Scholars, PG students, UG students who have an aptitude to work in the areas of data sciences and machine learning.

How to Apply:

Eligible candidates may apply by filling out the following google form with payment of proof on or before 31st May, 2023.
https://tinyurl.com/yzn4sf34

Registration fee:

Category	Amount (incl. of GST)
Faculty	Rs. 3000 /-
Research Scholars, PG students, UG students	Rs. 1500/-
Industry person	Rs. 5000/

Account Number: 676801700388
Account Name: Registrar (Sponsored research)
Bank Name: ICICI bank ltd.
Branch: MNIT Jaipur
IFSC Code: ICIC0006768