Faculty Development Program

Organized By:	Department of Computer Engineering
Title:	Journey into Machine Learning from Training to Prediction
Speaker:	Mr. Chintan Nagrecha
Date & Time:	15th March to 16th March - 2024
Venue:	RoomNo:10209 Computer Engineering Department
No. of Participants:	15 Faculty members

❖ **About FDP:**

Faculty Development Program aims to empower educators with essential skills in data sourcing, analytics, and machine learning. Participants will learn to effectively evaluate and utilize diverse data sources, fostering a culture of data-driven decision-making in academia. The program addresses data encoding techniques, ensuring faculty can prepare data for machine learning models effectively. Through a focused exploration of regression models and decision trees, faculty gain insights into predictive modeling for educational research, fostering evidence-based practices in teaching and learning.

Fig. Team Computer Engineering @FDP

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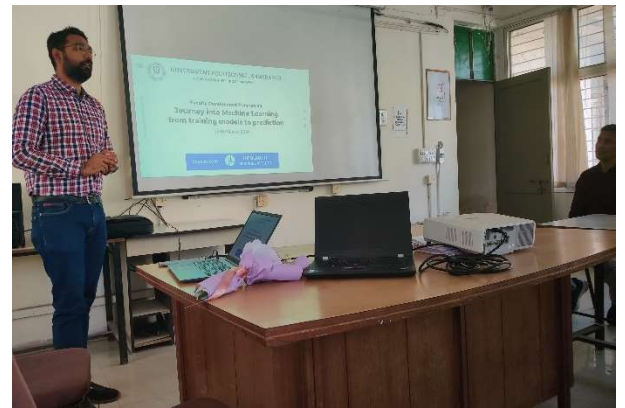## COMPUTER ENGINEERING DEPARTMENT

❖ **Brief Introduction:**

Objectives of the Program:
- Familiarize faculty members with the fundamentals of Machine Learning and its applications.
- Practical sessions on libraries like NumPy and Pandas equip faculty with tools for data manipulation and analysis, enhancing their ability to integrate Python-based data processing into teaching
- Furthermore, the program addresses data encoding techniques, ensuring faculty can prepare data for machine learning models effectively.
- Through a focused exploration of regression models and decision trees, faculty gain insights into predictive modeling for educational research, fostering evidence-based practices in teaching and learning.

Outcome and Impact:
- On completion of the Faculty Development Program, participants will possess the skills and knowledge to leverage data effectively in their educational and research endeavors.
- They will be equipped to identify, evaluate, and utilize diverse data sources, enhancing evidence-based decision-making in academia. Additionally, faculty will be proficient in data manipulation and analysis using Python libraries like NumPy and Pandas, enabling them to integrate data-driven approaches into their teaching curriculum.
- Finally, they will be adept at applying regression models and decision tree algorithms to derive actionable insights and drive innovation in educational research and practice.
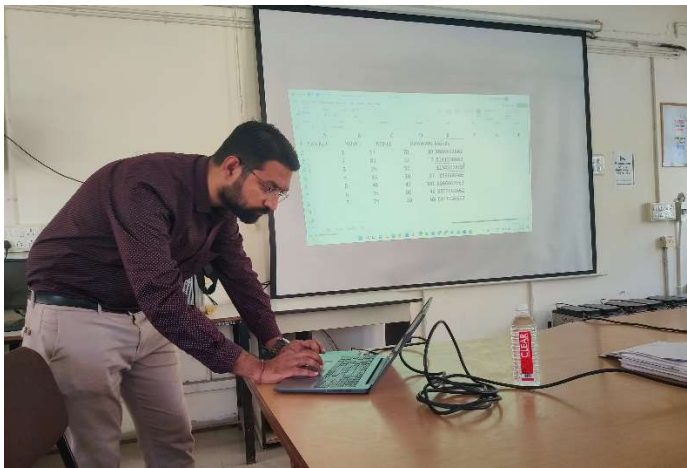
Day 1

Day 2

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Schedule

Date & Time	15th March Day 1	16th March Day 2
10:30 to 11:00	Inauguration	
11:00 to 01:00	**Session 1** Data Sources – Including fetching data from the API Mr. Chintan Nagrecha	**Session 1** Basics of Numpy and Pandas – Important libraries in Data Science Mr. Chintan Nagrecha
01:00 to 02:00	Lunch	
02:00 to 03:30	**Session 2** Data Analytics – Operations of the fetched data Mr. Chintan Nagrecha	**Session 2** Data Encoding – Preparing data for machine learning Mr. Chintan Nagrecha
03:30 to 03:40	Break	
03:40 to 05:30	**Session 3** Basics of Numpy and Pandas – Important libraries in Data Science Mr. Chintan Nagrecha	**Session 3** Machine Learning – Model Training and Prediction Mr. Chintan Nagrecha

The faculty development program is crucial for enhancing faculty knowledge, skills, and professional competence in allied domain. This program created positive impact on faculty vitality, academic performance, and the overall educational environment.