

Workshop Report

Department of Computer Science and Engineering, GNDEC College has organized a workshop on trending area of research regarding AI and ML with the collaboration of **Ansh Infotech** for the students of B.Tech. (CSE) and M.Tech. (CSE) students. The talk covered essential concepts, techniques, and tools, showcasing practical applications through the example of a "**Laptop Price Predictor**" project.

Overview of the Lecture:

1. Introduction to Machine Learning:

- Speaker began by elucidating the core principles of machine learning, emphasizing its role in extracting meaningful patterns from data.
- The lecture delved into the two main types of machine learning: supervised and unsupervised learning, with a focus on how they contribute to predictive modelling.

2. Data Analysis with Python:

- The expert's highlighted the significance of data analysis in the machine learning pipeline and elucidated on the steps involved in exploring and preparing a dataset for analysis.
- Practical demonstrations using Python showcased the power and versatility of the language in handling data, including data cleaning, preprocessing, and feature engineering.

3. Laptop Price Predictor Project:

- A hands-on demonstration of the "Laptop Price Predictor" project was presented, illustrating how machine learning algorithms can be applied to predict laptop prices based on various features.
- The project included steps such as data collection, feature selection, model training, and evaluation, providing a comprehensive understanding of the machine learning workflow.

In conclusion, experts provided an insightful and practical overview of machine learning fundamentals and data analysis using Python. The "Laptop Price Predictor" project served as an excellent example, demonstrating the application of these concepts in a real-world scenario. The exploration of Python libraries NumPy, Matplotlib, and sklearn added a practical dimension to the lecture, highlighting their importance in the data science ecosystem.

