

# Machine Learning using Python

**TITLE** : **Machine Learning using Python**  
**VENUE** : Lab 5 – IT Department  
**PARTICIPANTS** : III Year & II Year Students  
**TRAINER** : Dr. Ch. V. Raghavendran, Professor,  
Department of Information Technology.

## **Description of the Event:**

Artificial Intelligence (AI), Machine Learning (ML) and Data Science (DS) are the pillars of the fourth industrial revolution. ML is an application of AI which allows computers to automatically learn from data without being explicitly programmed. Python has been designed with the provision for creating Machine Learning algorithms. Python is preferred as the best and robust platform for Machine Learning systems. Python also has numerous libraries for machine learning, data manipulation and analysis as well as a very active development community that continuously updates and creates new packages. It has been adopted by a wide variety of industries and applications including Data Science, Machine Learning, Data Analytics, Predictive Analytics, Business Intelligence and Web Analytics. This workshop aims to explore Python Programming right from installation, fundamentals to Machine Learning algorithms.

The workshop covered the basic algorithm that helps us to build and apply prediction functions with an emphasis on practical applications.

## **The outcomes of this workshop are:**

- ✓ Understand the components of a Machine Learning algorithm.
- ✓ Apply Machine Learning tools to build and evaluate predictors
- ✓ How Machine Learning uses computer algorithms to search for patterns in data
- ✓ How to uncover hidden themes in large collections of documents using topic modeling

- ✓ How to prepare data, deal with missing data and create custom data analysis solutions for different industries
- ✓ Basic and frequently used algorithmic techniques including sorting, searching, greedy algorithms and dynamic programming
- ✓ Familiarity with Python installation, syntax and design
- ✓ At the end of this workshop, Mr. Shubham demonstrates the designing of small running projects. He conducted a quiz as whole workshop content and will give certificate after the evaluation the quiz & performance of students.