## **2-DAYS Workshop On Machine Learning Using Python**

Date- To be decided

Registration amt- Rs. 100/-

Phone Pe - 9668306789

Upi Id- souveek.roy@ybl

Title- Machine Learning Using Python

## **Python Basics and Environmental Setup**

- Introduction to AI and Machine Learning
- Application Areas
- Python and Anaconda Environment Installation: Jupyter Notebook
- Basics of Python
- Data Types- Numbers, String, Tuple, Dict.
- Functions, Operators & Control Flow
- Libraries used in ML- Numpy, Pandas, Matplotlib
- Numpy and Matplotlib Operations

## **Machine Learning Introduction and Exploring Data Sets**

- Introduction to Machine Learning and Its types
- Perform operations using Data Types and Operators
- How to get accurate datasets
- How to use your dataset for machine learning?
- Introductions to Pandas
- Pandas Operations
- Data Collection and cleaning using Pandas
- Making a Data Pre-processing Template
- Introduction to Data Visualisation using Matplotlib
- Hands-on Exercise How to import NumPy module, importing a dataset,
  pre-processing the dataset and creating visualisations

## **Regression and Classification in Machine Learning**

- Supervised Learning: Regression vs Classification
- Linear regression theory

- Linear regression project using statistics
- Linear regression project using machine learning libraries Decision Tree Classification theory
- Linear regression project using machine learning libraries
- Hands-on Exercise working on importing data from .csv files, selecting record by a group, data pre-processing, viewing records, analysing with linear regression/classification with decision tree.