**Machine Learning using Python**

**Prerequisite:**

* Basic Concept of Python
* Basic concept of Mathematics and Statistics

**Course Content:**

**Day 1: -**

**Introduction to Machine Learning**

* The main types of machine learning
* Supervised, unsupervised learning
* Using Python for machine learning

**Machine Learning packages in Python**

* Revision of python
* Introduction to Numpy and Pandas
* Creating 1D numpy array using array() and arange()
* Creating 2D array using reshape() function
* Introduction to Pandas Series and Data frame
* Read csv file using read\_csv() of pandas
* Introduction to Matplotlib & seaborn

**Day 2: -**

**Dealing with Datasets**

* Training Data and Test Data
* Split data into train and test set using sklearn

**Regression and Classification using Scikit-learn**

* Simple Linear Regression using sklearn
* Multiple Linear Regression using Sklearn
* Classification using logistic regression, Random Forest, SVM

**Day 3:-**

**Unsupervised Learning**

* What is unsupervised learning
* Clustering and its algorithm
* Clustering using K-Means

**Deep Learning Using TesnsorFlow:**

* Why to need go in Deep
* Introduction Deep learning and Neural network
* Introduction to tensorflow
* Some basic operations on tensor flow