

Course Duration: 4 Days

Description

Machine learning is eating the software world, and now deep learning is extending machine learning. Thoroughly updated using the latest Python open source libraries, this course offers the practical knowledge and techniques you need to create and contribute to machine learning and modern data analysis.

Prerequisites

You should be familiar with the programming language Python. Basic of Python programming language is enough, and you should familiar with Mathematics and Statistics.

Course Outline

Pyhton Libraries

- Python and Data Analysis Libraries
- Loading data, Explore Pandas Libraries

Data Wrangling

- Access Difference Path of Data
- Slicing & Grouping Dataframe
- Statistics Fundamentals for Data Analysis
- SQL using Python
- Matplotlib Visualization
- Seaborn Visualization
- Pandas Visualization

Statistics

- Analyze Statistics Score
- Correlation, Skewness, Kurtosis
- Removing Outlier using IQR and Standard Deviation
- Statistics Metrics

Supervised Machine Learning

- Introduction to Regression
- Intorduction to Classification
- Linear, Logistic, Decision Tree Regression and Classification

Unsupervised Machine Learning

- Introduction to Clustering
- K-Means Clustering
- Mean-Shift Clustering
- K-Prototype Clustering

Time Series

- Introduction Deep Learning
- Long Sort-Term Memory Model.
- Data Normalization and Standarization.
- Bandwidth Forecast.
- Huber Optimizers.
- Moving Average
- Autoregressive Forecasting
- ARIMA