Data Analysis using Python

Course description

Learn how to analyze data using Python. This course will take you from the basics of Python to exploring many different types of data. You will learn how to prepare data for analysis, perform simple statistical analyses, create meaningful data visualizations, predict future trends from data, and more!

Data Analysis using Python online training curriculum

Data Analysis using Python
- Introduction to Python
- Installation and Configuration Python
- Custom Environment Settings
- IPython Notebooks

Using Python to Control and Document Your Data Science Processes
- Basic objects in Python
- Variables and self-defining functions
- Control flow
- Reading and Writing Data
- Simple Plotting

Accessing and Preparing Data
- Loading from CSV Files
- Accessing from SQL Database
- Accessing From Online Cloud Database
- Cleansing data with Python
- Normalizing data
- Formatting data

Numpy
- Numpy Essentials
- The NumPy array
- 2D plotting with Matplotlib
- N-dimensional array operations and manipulations

Pandas and scipy.stats
- Exploring data with Pandas and scipy.stats
- Data manipulation with Pandas
- Statistical analysis with Pandas
- Time series analysis with Pandas
- Overview of statistical tools in scipy.stats

Visualization
- 3D/Advance visualization
- Creating 3D Bars
- Creating 3D Histograms
- Animation in matplotlib
- Plotting with Images
- Plotting data on a Google Map using API

Solutions
- Packing and Distributing package/Solution
- Case Studies
- Analyzing Financial Data and Creating CFO Dashboard
- Build Global HR Analytical Model