multisoft
Systems

Data Science with Python Training

COURSE CONTENT

About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

About Course

The Data Science with Python course offered by Multisoft Systems is designed to provide comprehensive knowledge in various Python libraries and packages essential for data analysis, visualization, web scraping, machine learning, and natural language processing. The course includes practical applications through live projects, demonstrations, assignments, and case studies.

Module 1: The Data Science: An Overview

- ✓ Introduction to the Data Science
- ✓ Different Sectors Using Data Science
- ✓ The Purpose and Components of Python

Module 2: Data Analytics Overview

- ✓ The Data Analytics Process
- ✓ Exploratory the Data Analysis (EDA)
- ✓ EDA-Quantitative Technique
- ✓ EDA - Graphical Technique
- ✓ The Data Analytics Conclusion or Predictions
- ✓ The Data Analytics Communication
- ✓ The Data Types for Plotting

Module 3: Statistical Analysis and Business Applications

- ✓ Introduction to the Statistics
- ✓ About Statistical and Non-statistical Analysis
- ✓ The Major Categories of Statistics
- ✓ About the Statistical Analysis Considerations
- ✓ The Population and Sample
- ✓ What is the Statistical Analysis Process?
- ✓ The Data Distribution
- ✓ Dispersion

Module 4: Python Environment Setup and Essentials

- ✓ About the Anaconda
- ✓ The Installation of Anaconda Python Distribution
- ✓ Data Types in the Python
- ✓ Basic Operators and Functions

Module 5: What is Mathematical Computing with Python (NumPy)?

- ✓ An Introduction to the Numpy
- ✓ The Activity-Sequence it Right
- ✓ Class and Attributes of ndarray
- ✓ All About the Basic Operations
- ✓ Activity-Slice It
- ✓ Copy and Views
- ✓ About the Mathematical Functions of Numpy

Module 6: The Scientific computing with Python (Scipy)

- ✓ Introduction to the SciPy
- ✓ About the SciPy Sub Package - Integration and Optimization
- ✓ What is SciPy sub package?
- ✓ Know About the SciPy Sub Package - Statistics, Weave and IO

Module 7: The Data Manipulation with Pandas

- ✓ Introduction to the Pandas
- ✓ Understanding Data Frame
- ✓ The Missing Values
- ✓ The Data Operations
- ✓ About File Read and the Write Support
- ✓ What is Pandas SQL Operation?

Module 8: The Natural Language Processing with Scikit Learn

- ✓ NLP: An Overview
- ✓ What are NLP Applications?

✓ About NLP Libraries-Scikit

✓ The Extraction Considerations

✓ The Scikit Learn-Model Training and Grid Search

Module 9: The Data Visualization in Python using matplotlib

✓ Introduction to the Data Visualization

✓ What are Line Properties?

✓ (x,y) Plot and Subplots

✓ The Types of Plots

Module 10: Web Scraping with Beautiful Soup

✓ Web Scraping and Parsing

✓ Understanding and Searching the Tree

✓ Know the Navigating options

✓ Know About Modifying the Tree

✓ How to Parse and Print the Document?

Module 11: Python integration with Hadoop MapReduce and Spark

✓ Know Why Big Data Solutions are provided for Python?

✓ Describing Hadoop Core Components

✓ The Python Integration with HDFS using Hadoop Streaming

✓ The Python Integration with Spark using PySpark