TRAINING PROGRAM

Jhis program guide to Building a career in

jupyter Python of git

Data Analytics

**PYTHON** 

# **COURSE** CONTENT

A streamlined range of courses with hands-on-experience to help you learn and implement data analytics for career or businessgrowth.

#### **Tools and Techniques in Data Science**

What is Data Analytics and Data Science? Introduction to Data Science Introduction to Data Driven Decision Making Introduction to Data Science Platforms for Data solving

**Course: Introduction to Python** 

## Part 1:Data Structures

Introduction to Jupyter Other Python Interfaces Data Structures, Strings, Datetime, Numeric, Lists, Tuple Dicts, Loops, Functions, Classes Part 2: Scienti c Packages of Python Using functions from Packages in Python, Math Package Date time Package, OS Package, SciPy

## **Course: Data Analytics using Python**

Introduction to Pandas Introduction to Pandas, Data Import, Data Inspection, Data Quality, Data Manipulation Using Pandas for Data Analysis Data Manipulation, Data Querying, Data Summarizing, Data Exploration, Data Merging

### Course: Data Visualization using Python

Data Visualization using Python Concepts in Data Viz, Grammar of graphics, Tufte and Data Viz, Seaborn and Matplotlib

# Course: Machine Learning using Python

Using scikit-learn for supervised learning Parameter tuning, Diagnostics, Over tting,Plotting,Data Preprocessing Using scikit-learn for unsupervised learning

#### Course: Advanced Data Analytics Techniques using Python

Time Series Analysis, Text Mining, Sentiment Analysis Social Network Analysis, Deep Learning, Neural Networks

## Applied Statistics for Data Analysts

## **Basic Statistics**

Central Tendency, Dispersion, Central Limit Theorem, Normalization

## **Advanced Statistics**

Distributions, Probability, Bayes Theorem, Hypothesis Testing

## **Projects (2 Weeks)**

• Slice and dice datasets like Wikipedia to extract valuable insights, and apply the major techniques required by a Data Analyst