

PYTHON FOR FINANCIAL PROFESSIONALS

SUMMARY:

This course takes a hands on approach to rapidly gain the skills needed to develop Python programs to solve typical Finance problems, cutting through the noise of generic “Data Science” courses. Participants will be introduced to best practices programming in Python to clean, analyze and visualize Financial Data.

Prerequisites: Participants do not require prior programming knowledge but a general understanding of programming principals is recommended. Participants should also understand Finance concepts, but in-depth analytical understanding is not necessary. Participants will be expected to download & install Anaconda or an equivalent Python distribution in advance of the course.

Timing: This course requires 1 – 2 days, depending on the amount of material to be covered

Experts in financial modeling
training and consulting

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LEARNING TOPICS:

Using Python

- ✓ Developing familiarity with the Anaconda Python Distribution
- ✓ Managing environments and Installing packages
- ✓ Gain familiarity with open source Python Development Environments
- ✓ Learn how to write programs in Python and developing an understanding for data structures, functions, loops, logical operations and other programming best practices

Data Collection, Cleaning, Manipulation and Visualization

- ✓ Learn how to import data from various sources (CSV, SQL, JSON, Excel) into *pandas* (a high-performance library of data structures)
- ✓ Develop the necessary skills to clean raw financial data, and gain familiarity in overcoming common issues with numerical data
- ✓ Learn how to merge data from various sources and leverage built-in functionality to gain efficiency
- ✓ Build programs to perform exploratory data analysis using basic statistical functions
- ✓ Develop the ability to create powerful visualizations using the *matplotlib* package

Data Analysis and Modeling

- ✓ Gain experience in performing statistical analysis, linear regression, time series regression, and optimization
- ✓ Build and test financial market analyses to explore common tasks such as capital asset pricing, times series forecasting, multi-factor models and portfolio optimization

Learn Python to Manipulate, Analyze and
Visualize Financial Data