Python 1: Core Data Analysis

For Business and Finance Professionals

Summary

During this hands-on course, participants will 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

A general understanding of programming principles is recommended but not required. Participants should also understand finance concepts but in-depth analytical understanding is not necessary. Participants are expected to download & install Anaconda or an equivalent Python distribution in advance of the course.

🕐 Timing

This course requires 8 hours.

Learning Topics

1. **Using Python**
   - ✓ Develop familiarity with the Anaconda Python Distribution
   - ✓ Manage 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

2. **Data Collection, Cleaning, Manipulation and Visualization**
   - ✓ Import data from various sources (e.g.: CSV, Excel, HTML) 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
   - ✓ 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 pandas plotting functions