



# R FOR FINANCIAL PROFESSIONALS

#### **SUMMARY:**

Leveraging the powerful researchoriented functions in R, this course is designed to provide practice with common econometric tools used in Finance.

Participants will be introduced to best practices programming in R to clean, analyze and visualize Financial Data.

Prerequisites: Participants do not require prior programming knowledge but general understanding of programming principals is recommended. Participants will be expected to download and install RStudio before 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 R in RStudio

- ✓ Developing familiarity with RStudio
- ✓ Introduction to Markdown
- ✓ Learn how to write programs in R and developing an understanding for functions, loops, logical operations and other programming best practices

## Data Collection, Cleaning, Manipulation and Visualization

- ✓ Learn how to import data into data frames
- 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 builtin functionality to gain efficiency
- Build programs to perform exploratory data analysis using basic statistical functions
- Develop the ability to create powerful visualizations using the ggplot package

## **Data Analysis and Modeling**

- Gain practical experience in selected quantitative methods including linear regression, time series analysis, hypothesis testing and correcting for common statistical inference issues encountered with financial data
- Build and test financial market analyses to explore common tasks such as capital asset pricing, times series forecasting and multifactor models

Learn R to Manipulate, Analyze and Visualize Financial Data