Lesson 4: Matplotlib

Course Agenda

- Python Crash Course
- Data Analysis:
  - NumPy
  - Pandas
- Data Visualization:
  - **Matplotlib**
  - Seaborn
  - Pandas
  - Plottly and Cufflinks
  - Geographical Plotting
- Machine Learning
  - Linear Regression
  - Logistic Regression
  - K Nearest Neighbors
  - Decision Trees and Random Forests
  - Support Vector Machines
  - K Means Clustering
  - Recommender Systems

Matplotlib

- Matplotlib is the most popular plotting library for Python
- It gives you control over every aspect of a figure
- It was designed to have a similar feel to MatLab's graphical plotting

Here you can find a Matplotlib documentation:

- https://matplotlib.org/stable/gallery/index.html

Matplotlib Installation

If you use Anaconda distribution, most likely you have Matplotlib installed.

Otherwise, you'll need to install matplotlib by going to your command line or terminal and using either:

conda install matplotlib

pip install matplotlib

Maplotlib Agenda

- Basic Plots
- Creating Multiplots on Same Canvas
- Introduction to the Object-Oriented Method
- Figure Size, Aspect Ratio and DPI
- Saving Figures
- Legends, Labels, and Titles
- Setting colors, Linewidths and Linetypes
- Line and Marker Styles
- Control Over Axis Appearance

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