# Installing Python Locally

MGMT 675: AI-Assisted Financial Analysis

# Outline

- Install python
- Install packages
- Test installation
- Download and run Streamlit app
- Use JupyterLab

# Install Python

- Download installer from python.org
- Caution: When running installer, check "Add Python to PATH" on very first screen.
- Run installer, accepting other defaults.

# Install Packages

- Open Command Prompt app (Terminal on Mac)
- Pip install libraries. Can install libraries one at a time or in a batch by typing in Command Prompt and hitting enter.
- Example:
  - `pip install pandas numpy matplotlib yfinance==0.2.54`
  - `pip install streamlit==1.44.1 seaborn jupyterlab`
  - `pip install scipy statsmodels python-pptx lxml`
  - `pip install openpyxl pandas-datareader`

# Test Installation

- On Windows, in Windows Explorer (file/directory app), select "This PC > Local Disk (C:) > Users > Your username"
- Click New - Directory and name it mgmt675
- Download test.py from the course website to the mgmt675 directory
- In Command Prompt, execute
  `cd "C:\Users\Your username\mgmt675"`
- In Command Prompt, execute
  `python test.py`
  On Mac, use `python3 test.py`
- You should see "Ready to Go!" If you get a "no module named ..." error, use pip install to install the missing module.

# Run Streamlit App

- Download "Streamlit zipfile" from course website. Extract all files to the mgmt675 directory.
- Navigate using cd to the mgmt675 directory in Command Prompt if you are not already there.
- In Command Prompt, execute "streamlit run app.py."
- The app should open in a tab in your default browser.
- When you enter a ticker, you should see the cost of equity calculation, a scatter plot, and a Download button for the PowerPoint deck.
- If you want to execute another command in Command Prompt, use CTRL-C to stop the streamlit app.

# Use JupyterLab

- Open Command Prompt and use cd to navigate to the mgmt675 directory if you are not already there.
- In Command Prompt, execute "jupyter lab"
- The JupyterLab app should open in a tab in your default browser.
- Test with, for example, `import numpy as np` and `np.sqrt(9)` on two separate lines.