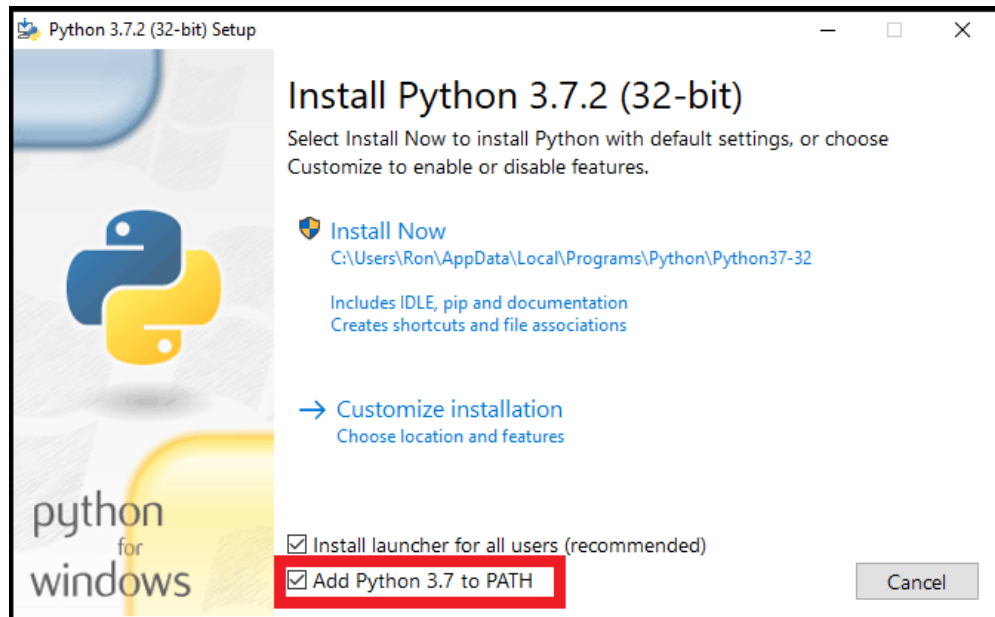


Technical Requirements:

- Microsoft Excel 2016 or higher (Solver, Data Analysis add-ins must be installed and enabled)
- Python 3.7 or Higher
- Anaconda Distribution (should match your Python Version and OS)
- Required Python Libraries (via Requirements File in Git Project):
- Go to Python Console or Anaconda Console
 - `pip install -r ...file-path/requirements.txt`
 - The easiest way to do this would be to type *pip install -r* in the console and then drag and drop your requirements file to the console.

Python Installation:

- You must install python 3.7 or higher.
- Use this link to download the appropriate version for your computer:
<https://www.python.org/downloads/release/python-381/>
- For windows users:
 - Ensure to select install to PATH in the installation wizard. Refer to the image



below.

- To test if you have successfully installed the right version of python on your computer, open the command prompt on windows or the terminal on Mac and run one of the following commands:
 - Windows: `python --version`
 - Mac: `python -V`

Package Requirements Installation:

- You will need Anaconda or a python console with pip installed to be able to install the appropriate packages.
- Use the following link to install the appropriate Anaconda version:
<https://www.anaconda.com/distribution/>.
- After installation, open the Anaconda Console and do either one of the following:
 - Download the appropriate packages via requirements.txt
 - Download the project from the GitHub repository and extract the files.
 - Use this link to access and download the file:
<https://github.com/BashManVP/TechTalksPortfolioOptimization>
 - Type in the following command *pip install -r* and then drag and drop the requirements file into the console. Your command before pressing enter should look something like this:
`pip install -r "C:\Users\RCFTA\Documents\RCFTA\requirements.txt"`
 - You should then see the python packages being installed.
 - Download each package individually
 - Open the Anaconda console and run the following commands one at a time:
 - `pip install numpy`
 - `pip install alpaca-trade-api`
 - `pip install quandl`
 - `pip install PyPortfolioOpt`