Class 2 – Python Crash Course

Pedram Jahangiry

Fall 2019



Install Python with Anaconda

Anaconda:

- A distribution of python
- Includes Python and many other libraries
- All-in-one install

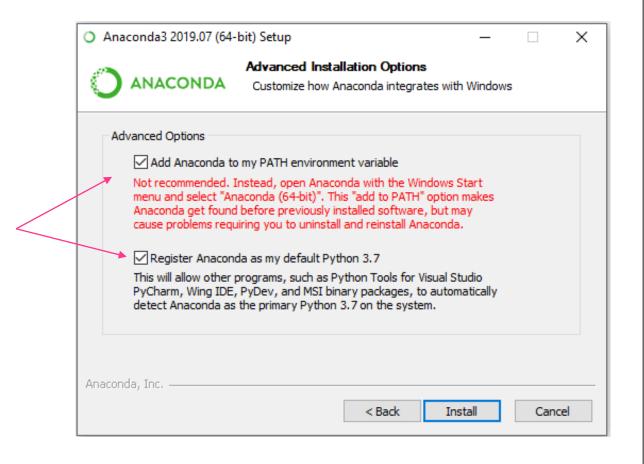
Jupyter:

- A development environment for writing code and markdown and display images
- Most popular IDE
- Best learning/teaching tool

Install Python with Anaconda

https://www.anaconda.com/

- 1. Download the <u>Graphical</u> <u>Installer</u>
- 2. Make sure checking both boxes
- 3. Search for Anaconda Navigator



Data Science Libraries

• Numpy:

- A Linear Algebra library for python.
- Very fast (binding to C libraries)
- Building block of almost all of the libraries in the PyData ecosystem (Pandas, Scipy, Scikit-learn and etc).

• Pandas:

- A library built on top of Numpy.
- Allows for fast analysis and data cleaning
- Has built-in visualization features

• To install any library:

- conda install numpy
- pip install numpy

Data Science Libraries

- matplotlib:
 - Most popular plotting library for python.
 - Very similar to MATLAB's plotting.

- seaborn:
 - A statistical plotting library
 - Built on top of matplotlib

- To install any library:
 - conda install numpy
 - pip install numpy