Getting Started with Python

Predictive Analytics with Python

Developed for:

Center for Computational and Applied Mathematics November 16, 2018

Instructor:

Arjang Fahim
fahima@uci.edu
Department of Biomedical Engineering
University of California, Irvine

Install Anaconda

- Go to the following link: https://www.continuum.io/downloads
- Follow instructions for your system (Mac, Windows, Linux) to install the Python
 2.7 version of Anaconda
 - The file is approximately 300-500 MB so it may take a while to download in the class period; additionally the file takes a while to install
 - Please be sure to do this prior to class to maximize time learning Python
- Review the following tutorials if you're interested in investigating Conda more:
 - http://conda.pydata.org/docs/get-started.html

Once Anaconda is installed (or if Anaconda is already installed):

- Open a terminal
 - On a Mac or Linux machine open up the terminal
 - On a Windows machine the easiest option is to use the Anaconda Prompt that comes with Anaconda.
 - Unfortunately I am not that familiar with the windows command prompt commands. So please review the command prompt commands prior to class.
 - If you are more advanced in Windows and would like to get a UNIX terminal to work with Conda please go ahead!
- Check the version of Anaconda. Type the following into your terminal
 - o conda --version
 - o conda will respond with the version number that you have installed, like: conda 3.11.0
- Update conda to the latest version by typing the following commands
 - o conda update conda
- If a newer version of conda is available, type Y to update
 - o Proceed ([y]/n)? y
- Update the *Anaconda* meta package:
 - o conda update anaconda

٠,

Changing from Python 3.5 to Python 2.7

- Check the current version of python from the installation
 - o python --version
- This should return something similar to:
 - o Python 2.7.11 :: Anaconda 4.0.0 (x86 64)
- If it does not say Python 2.7 or Anaconda:
 - If not Anaconda:
 - There is another distribution of python that is installed and ahead of Anaconda in the path. Often this is the Canopy Enthought version of python.
 - On a Mac of Linux machine, to fix this you must edit your .bash_profile, .profile, and .bashrc files to remove mentions of the Canopy version.
 - If you're stuck at this step we can attempt to fix the issue early in the day of the workshop
 - o If not Python 2.x and instead Python 3.y, then:
 - Create a Python 2.7 environment
 - conda create -n py27 python=2.7 anaconda
 - Activate the new environment
 - source activate py27
 - Check python version
 - python --version
 - Update conda
 - conda update conda
 - Update the *Anaconda* meta package:
 - conda update anaconda

Installing a text editor

- If you do not already have a text editor that you are comfortable using on your machine, please install one prior to the class
- One very common one to use is Sublime Text which is available for Mac OS, Windows and Linux
 - https://www.sublimetext.com/
 - Free to download and evaluate, though the full version of the software for continued use costs money.
 - The free version will be adequate for the class
- If you are adventurous, learn how to use vim, emacs, or nano which are alternate command line text editors.
 - These text editors have a steep learning curve, but are very powerful once you get the hand of them.

• • •