How to get started with iPython?

The bootcamp (as well as the following ADS classes) will be facilitated through Jupiter iPyhon notebook environment. We will use python 2.7 kernel by default.

There are two options to follow:
1. ***Recommended: access through CUSP ADRF*** http://cusp.adrf.cloud

It has been developed to be a dedicated resource for CUSP students and teaching faculty for use in their coursework and is available to all CUSP students. It provided full online support for iPython notebooks and has all necessary Python packages installed.
Simply
- login with you ADRF credentials,
- select Launch JypiterHub,
- create folder for your notebooks,
- upload the class notebook provided in the class,
- open the notebook choosing PUI2016_python2 kernel

and you're good to go!

2. Install on your local machine (optional)
Although this could take more effort getting started as you'll have to make sure to have python 2.7 with all the necessary packages as well as jupyter installed properly (which sometimes comes with various issues), it will give you more flexibility to work on your notebooks while you're offline.

Install on Mac OS or Linux
NOTE: While you can simply download python and jupyter installer packages from https://www.python.org/downloads and https://ipython.org we highly recommend you perform complete installation from command line to make sure your system is well set up to install any further updates and packages whenever needed. Please feel free to skip any of the steps below if you already have those installed. Also please make sure you have admin password to run commands in sudo mode as you'll be asked for one.
- Before installing Python, you'll need to install a C compiler. The fastest way is to install the Xcode Command Line Tools by running

   ```
   xcode-select --install
   ```
- Installing Brew (if you already don't have it)

```
/usr/bin/ruby -e "$(curl -fsSL https://raw.githubuserconten
t.com/Homebrew/install/master/install)"
```
Update Brew: `brew update
- Install Python 2
    ```
    brew install python
    ```
    (if you want to use python3: `brew install python3`)

Linux Flavored OS (assuming Ubuntu)
- Using your package manager install Python
    ```
    sudo apt-get install python
    ```
    (or `sudo apt-get install python3` if you want to use python3)
- Install python package manager
    ```
    sudo apt-get install python-pip
    ```
    (or `sudo apt-get install python3-pip` if you want to use python3)

Further commands common for Mac and Linux
- Install jupyter
    ```
    pip install jupyter
    ```
    (or `pip3 install jupyter` if you want to use python3)
- Installing Numpy, Matplotlib, Scipy, Pandas
    ```
    pip install numpy matplotlib scipy pandas packages
    ```
    (use `pip3` for python3)

If, for Linux flavored OS, the above command gives you a dependency error, replace it with
```
sudo apt-get install python-<package name>
```

Windows
First install python by downloading an executable installer from
https://www.python.org/downloads/windows/
Then download and install iPytnon following instructions from
https://ipython.org/ipython-doc/2/install/install.html