

NIFTI SOAR 2018

Instructions

Complete all of the steps below before workshop.

1. Install Python on your computer. Follow the instructions (Python and Anaconda) below.
2. Fire up jupyter!

Mac: Open the Terminal app. Windows: Open a terminal cmd.

Once you're in terminal, type in this command:

```
jupyter notebook
```

Hit enter, and this will launch a new browser window (or tab) showing the Notebook Dashboard. From here, you can navigate through directories, make new notebooks, or open existing ones.

To close and shut down Jupyter Notebook, you need to do more than close the browser window. To completely shut it down, you will have to close down the associated terminal.

3. Download the starter Jupyter notebook that has been emailed to you. Save it to a location dedicated to work for this class on your computer.
4. Open the starter notebook and try to run the code!

Python and Anaconda

Python is a popular language for research computing, and great for general-purpose programming as well. Installing all of its research packages individually can be a bit difficult, so we recommend Anaconda, an all-in-one installer.

<https://www.anaconda.com/download/>

Please make sure you install the latest version of Python 3 (*version 3.6*). Unless you are super comfortable with command line, use the graphical installer and follow the instructions.

Install OpenCV (*version 3.3 or later*);

Mac: Open up the Terminal App. Windows: Open up the Anaconda Prompt terminal from the start menu.

Once you are in the terminal, type the command:

```
conda install -c conda-forge opencv
```

Hit enter. This might ask permission to download package. Enter Y. This will start downloading OpenCV.

We will use Python using the Jupyter Notebook, a programming environment that runs in a web browser. For this to work you will need a reasonably up-to-date browser. The current versions of the Chrome, Safari and Firefox browsers are all supported (some older browsers, including Internet Explorer version 9 and below, are not).