Setup

Please install all the below software before attending the course. You will need all this software to take part in the course.

After installation, please complete the pre-course survey (see below).

Objectives

- To ensure everybody arrives at the course with the right software packages installed

Where To Find Help

Sometimes installations don't run as smoothly as we would hope. If you get stuck there are a few useful resources online; I suggest the Software Carpentries wiki page here.

A Note on Web Browsers

We will teach using Jupyter Lab, which you interact with via a web browser. For this course you should ensure you have an up-to-date version of Chrome, Safari and Firefox installed.

Anaconda - Python including Jupyter Lab

As this course is based on programming with Python you need to install Python and Jupyter Lab, which we will use for teaching. For ease, we suggest installing the Anaconda Python distribution.

Anaconda will install, amongst other useful things, Python, Jupyter Lab and a package and environment manager (conda). It will also install useful Python packages including NumPy, SciPy, pandas, matplotlib and seaborn - all of which you will use during this course.

The most important thing to note is that however you install Python it should be Python version 3.7.

If you choose not to install Anaconda then please make sure you have the following packages(`==<version>`) installed before the course:

- `jupyterlab==1.0.2`
- `numpy==1.15.4`
- `scipy==1.1.0`
- `pandas==0.23.4`
- `matplotlib==3.0.2`
- `seaborn==0.9.0`

To install Anaconda

- *Windows:*
  1. Download the Python 3.7 Anaconda for Windows installer from (https://www.anaconda.com/distribution/#windows).
  2. Install using the installation defaults **except** "Add Anaconda to my PATH environment variable", which should be checked.
  - If you install Anaconda without checking this, please uninstall and start again.
- *MacOS:*
  1. Download the Python 3.7 Anaconda for macOS installer from (https://www.anaconda.com/distribution/#macos).
  2. Install using the installation defaults.
- *Linux:*
  1. Download the Python 3.7 Anaconda for Linux installer from (https://www.anaconda.com/distribution/#linux).
  2. Open a terminal window and navigate to your Downloads folder (see the Files and Directories page).
  3. Type `bash Anaconda3-` and press [Tab] twice, the full name of the file you downloaded should appear.
  4. Press [Return] and follow the text-only prompts:
  - Use [Spacebar] to scroll through the license, then type `yes` and press [Return] to approve
  - Press [Return] to approve the default location
  - Type `yes` and press [Return] to add Anaconda to your path.

Bringing Your Own Data

During the course we will load data and do some simple data analysis and plotting. If you have some example data that you know you want to process with Python please bring it with you.

We will check the suitability of your data on the day but please provide a description when you complete the pre-course survey.

Pre-course Survey

After installation, please read the other pre-requisite files and then complete the pre-course survey here.