Tools

Prerequisites

This course and associated materials do not presume any prior knowledge of Python, or programming in general.

To work with the course materials, you will need make sure the tools described here are installed on the computer you will be using.

None of the materials are computationally heavy.

What software you need?

- Python: Working install of python3.6
  - We will be using the anaconda distribution
- Jupyter Notebooks

Python is a programming language, whos development is led by the Python Software Foundation (PSF).

The official Python organization website is available **here (https://www.python.org)**.

Python

- Versions: there are different versions of Python.
    - We will be using 3.6.
- Packages: Python includes a "base set" of code (the standard library), and an extensive ecosystem of third party packages
    - In this course, we will largely focus on the standard library
    - For access to other packages when we need them, we will use Anaconda

Anaconda is an open-source distribution of Python, focused on scientific computing in Python.

The anaconda website is **here (https://www.anaconda.com)**.

CONDA®

Conda is a package management tool, that comes with anaconda.

Conda documentation is available **here (https://conda.io/docs/)**.

The Anaconda Ecosystem

- Anaconda itself is a distribution, that is, a copy of the Python standard library, included a curated collection of external packages.
- Conda is a package manager, allowing you to download, install, and manage other packages.

Jupyter notebooks are a way to intermix code, outputs and plain text. They run in a web browser, and connect to a kernel to be able to execute code.

The official Jupyter website is available **here (http://jupyter.org)**.

Installation

You only need to download one thing: anaconda, which comes complete with conda, and Jupyter notebooks.

Download anaconda from **here (https://www.anaconda.com/download/)**.