Python Install Instructions

Note – we will use the latest version of Python for these sessions (Python 3).

## Windows

There can be some issues with Python on Windows when using packages that insert themselves into the registry. You can solve this in different ways, but one of the simplest is to download a standalone Python distribution that lives in its own environment on your machine. One such distribution is WinPython, which has the added advantage that it already includes most of the modules used in scientific programming, as well as Qt for graphical interface generation. A Python IDE like PyCharm can also be used to switch between different interpreters and environments which gives you more control over what code packages and modules you use.

1. Install a WinPython distribution according to your machine requirements (32 vs. 64 bit) from <https://winpython.github.io/>. E.g. WinPython **3.5**.4.1Qt5-64bit
2. Install the PyCharm IDE for code editing: <https://www.jetbrains.com/pycharm/download/#section=windows>. Select the free community edition
3. Setting up PyCharm:
   1. Find the path to python.exe file in your WinPython distribution. For me it’s: C:\Users\ERSKINA\WinPython-64bit-3.5.3.1Qt5\python-3.5.3.amd64\python.exe
   2. In Pycharm navigate to File>>Settings>>Project Interpreter.
   3. Click the settings button in the top right of the panel and click add local
   4. Go to System Interpreter, in the interpreter field add the path to your python.exe file
   5. Click OK
   6. Click Apply
   7. Wait for changes to be applied.
4. Testing PyCharm configuration:
   1. Create a new project with File >> New Project
   2. (PyCharm might create a virtual environment within your project, can safely delete ‘venv’ in this case)
   3. Create a new Python file. Right click on project folder >> New >> Python file and name it something
   4. Double click to open new python file. Write the line import numpy in the file.
   5. Right click >> Run. If everything is installed correctly you should see the message: Process finished with exit code 0.

## Mac / Linux

You probably already have it for OSX 10.3 and up. Otherwise download latest release from python.org. Then follow same steps as above excluding step 1 and finding the main path for python.exe in step 3a.

## Extra

At some point you may want PyCharm to load modules that are external to your WinPython distribution (e.g. ones you’ve written yourself).

Go to File >> Settings >> Project Interpreter. Click on the settings button in the top right and select show all. Select your interpreter of choice and then click the file tree button (bottom button on right). Press + and add the folder in which your external module lives.