

# USE PYTHON DECODING FUNCTIONS WITH MATLAB : Instructions

## Install Anaconda

- Download and install Anaconda distribution : <https://www.anaconda.com/download/> (<https://www.anaconda.com/download/>).

Anaconda the easiest way to do Python data science and machine learning. It includes hundreds of popular data science packages and the conda package and virtual environment manager for Windows, Linux, and MacOS. Conda makes it quick and easy to install, run, and upgrade complex data science and machine learning environments like Scikit-learn, TensorFlow, and SciPy.

- When selecting the installation features, select 'ADD TO PATH' (despite the warning message).

This way, you can directly use 'conda' and 'pip' commands in the command window.

## Use the command prompt to install Python Packages

### Open the command prompt:

- On Windows : Win + R to open the executer, then type 'cmd' and press Enter
- On Unix : Ctrl+Alt+F[number] (most GNU/Linux systems allow 1-6 for [NUMBER]).

### Use the command prompt:

- Update Anaconda :

In [ ]:

```
conda update anaconda
```

- Install packages :

In [ ]:

```
pip install scikit-learn mayavi mne numpy matplotlib pyriemann --upgrade
```

Or individually :

In [ ]:

```
pip install scikit-learn --upgrade
pip install mayavi --upgrade
...
```

## Use python interfaces:

For Matlab users, it is recommended to use Python Graphical Interfaces, such as :

- Spyder (already installed with Anaconda) : the easiest for Matlab users

A powerful interactive development environment for the Python language with advanced editing, interactive testing, debugging and introspection features (<https://pythonhosted.org/spyder/> (<https://pythonhosted.org/spyder/>))

- PyCharm : the more powerful and technical

Rely on it for intelligent code completion, on-the-fly error checking and quick-fixes, easy project navigation, and much more. (<https://www.jetbrains.com/pycharm/> (<https://www.jetbrains.com/pycharm/>))

- Jupyter Notebook (already installed with Anaconda) : the minimalist

An open-source web application that allows you to create and share documents that contain live code, equations, visualizations and narrative text. Uses include: data cleaning and transformation, numerical simulation, statistical modeling, data visualization, machine learning, and much more. (<http://jupyter.org/> (<http://jupyter.org/>))

From now, you can also run python scripts from Matlab scripts !

Have fun :)