## **Downloading Anaconda**

The first step is to download Anaconda package that includes a lot of libraries interesting for engineers and scientists. In addition, it comes with several programming environment such as Spyder or Jupyter. To download this package, go to its <u>website</u> and select the version fitting your operating system. **Don't download nor install older version**!



## Creating the python environment

As soon as the package is installed, find and run the "Anaconda prompt" to open the conda terminal. Notice that this will open on the base Anaconda environment.



The next step is to create a dedicated environment for ANN to avoid any conflict with the current installation of your python environment (called (base)).

To create an environment and to activate it, please type these two programming commands:

- conda create -n ann\_env, where ann\_env is the name of the environment you want to create.
- activate ann\_env, where ann\_env is the name of the environment you want to activate.

## Installation packages

At this step, update anaconda environment :

✓ conda update -n base -c defaults conda

		112.0	-
astor	0.8.1-pv37 0> 0.8.1-pv37haa95532 0		
async-timeout	3.0.1-py37 0> 3.0.1-py37haa95532 0		
backcall	0.2.0-pv 0> 0.2.0-pvhd3eb1b0 0		_
blinker	1.4-py37 0> 1.4-py37haa95532 0		
colorama	0.4.4-pv 0> 0.4.4-pvhd3eb1b0 0		
diff-match-patch	20200713-py 0> 20200713-pyhd3eb1b0 0		
google-pasta	0.2.0-py 0> 0.2.0-pyhd3eb1b0 0		
imagesize	1.2.0-pv 0> 1.2.0-pvhd3eb1b0 0		
intervaltree	3.1.0-py 0> 3.1.0-pyhd3eb1b0 0		
fsonschema	3.2.0-py 2> 3.2.0-pyhd3eb1b0 2		
libspatialindex	1.9.3-h33f27b4 0> 1.9.3-h6c2663c 0		
pluggy	0.13.1-py37 0> 0.13.1-py37haa95532 0		
pyasn1	0.4.8-py 0> 0.4.8-pyhd3eb1b0 0		
pycodestyle	2.6.0-py 0> 2.6.0-pyhd3eb1b0 0		
pyflakes	2.2.0-pv 0> 2.2.0-pvhd3eb1b0 0		
pyparsing	2.4.7-py_0> 2.4.7-pyhd3eb1b0_0		
sphinxcontrib-app~	1.0.2-py 0> 1.0.2-pyhd3eb1b0 0		
sphinxcontrib-dev~	1.0.2-py 0> 1.0.2-pyhd3eb1b0 0		
sphinxcontrib-jsm~	1.0.1-py_0> 1.0.1-pyhd3eb1b0_0		
sphinxcontrib-gth~	1.0.3-py_0> 1.0.3-pyhd3eb1b0_0		
termcolor	1.1.0-py37_1> 1.1.0-py37haa95532_1		
wcwidth	0.2.5-py_0> 0.2.5-pyhd3eb1b0_0		
	1.1.0-py37 0> 1.1.0-py37haa95532 0		

When the correct environment is selected (this is the one in parenthesis in the beginning of the prompt of the terminal), you can start installing the relevant packages by typing all these programming instructions one by one and by confirming the installation of the packages needed by pressing the "y" key:

- ✓ conda install python
- ✓ conda install tensorflow
- ✓ conda install pydot
- ✓ conda install matplotlib
- ✓ conda install scikit-learn
- ✓ conda install -c conda-forge shap
- conda install spyder=5.05 (or Jupyter regarding your prefered programming editor)