TECHNISCHE UNIVERSITÄT DRESDEN

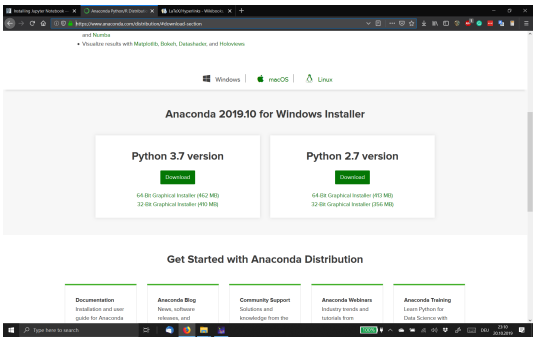
Installing JUPYTER Notebook

I strongly advice that you bring your laptop with JUPYTER notebook system installed to our tutorial classes. This will help us learn better and also improve your learning of solving computation problems using Python programming language. I recommend you several methods that you can use to install JUPYTER notebook to Windows™ system. Please contact me for installing it to other OS's (Mac OS™, Linux etc).

The recommended method – Using Anaconda

Anaconda is a free and open-source[5] distribution of the Python and its components programmes such as JUPYTER to several OS's. It is probably the easiest way to install and manage JUPYTER notebook. Perform the following steps to install Anaconda/Python/JUPYTER:

1. Visit Anconda site here
2. Download Python version 3+. Avoid version 2+ as it will be outdated by year 2020



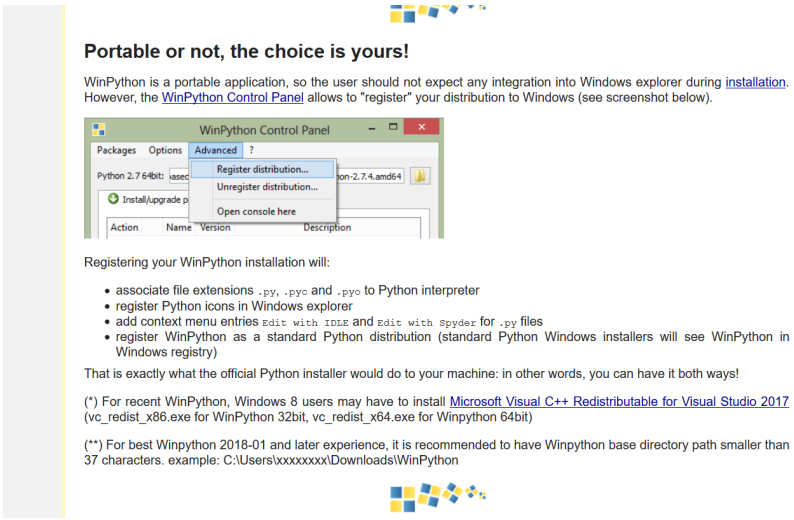
3. The download size is 400+ MB and included almost all libraries that is generally required for normal level computational work.
4. The downloaded package contains `*.exe` file that can be used to install Anaconda.
5. Proceed with default installation options during installation.
6. Once installed JUPYTER notebook will be available in Windows™ menu.

JUPYTER notebook runs in the browser. It will start in the default browser of the OS. This can be changed.

A good method – Using WinPython

WinPython is another very good method to get started with JUPYTER notebook available to your laptop. With WinPython no file is installed to your system, rather a large file with all requirements for using Python/JUPYTER executable (*.exe) are provided. Perform the following steps to get WinPython in your system:

1. Visit WinPython site here
2. Download stable Python version 3+ available
3. The download size is 400+ MB and included almost all libraries that is generally required for normal level computational work.
4. The downloaded package contains `*.exe` file that can be used to extract Python/JUPYTER to your laptop. You can extract the file in any folder in your system.
5. It is recommended that you register the WinPython to your system. This can help the beginners. To do that, use WinPython Control Panel and follow the default steps.



6. Once installed JUPYTER notebook will be available in Windows™ menu.

WinPython is a good method but Anaconda is still recommended as updates are more frequent and community supports are larger.

An expert method – not for beginners of Python

Not recommended as this method requires that you have a good understanding of OS and beside you need to install libraries as and when required. Good part is that this method will require less hard-disk space than other methods. Perform following steps to install Python/JUPYTER using this method:

1. First step - Install Python 3.5+ from this here
2. Ensure to check the `Add Python to PATH` option during installation

3. JUPYTER then should be installed form **"command prompt"** by using the command `python3 -m pip instal` followed by `python3 -m pip install jupyter`
4. Similar commands have to used to install Python Packages such as Numpy, Scipy etc.

Other methods – e.g., Online JUPYTER notebook

JUPYTER notebook is provided by several online providers. More often these providers provide limited version of JUPYTER system for free. The free version may already be sufficient for our purpose. Few JUPYTER providers and their weblink is provided below.

1. Enthought-Canopy^{TM} - This is not a online provider but Anaconda like distributor. They provide complete Python system with JUPYTER for local system. Enthought-Canopy^{TM} can be downloaded from here.
2. Google Colab^{TM}: A very good online JUPYTER notebook system from Google. Check it here.
3. CoCalc^{TM}: CoCalc^{TM} supports very good implementation of JUPYTER notebook. Limited cost-free option can be a good option. CoCalc^{TM} can be obtained from here.
4. Microsoft Azure^{TM}: This, can be obtained from here, provide a very good option to get started with JUPYTER notebook.