

# Setting up Python, Pytorch and Jupyter on Windows

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## 1 Option 1: Using pip

Navigate to <https://www.python.org/> and download the latest version of Python (3.7.3 currently) compatible with your machine. **Windows x86-64 web-based installer** would work for most. Open the installer and make sure to select **add python 3.7 to PATH**. Check that python is up and running by typing 'python' in your preferred command-line shell (Command Prompt, Powershell, Git Bash, Cygwin, etc.), this will also display the version of Python that your machine is using. Make sure it's the one you installed. You can also verify this straight away by running the following command :

```
python --version
```

Installing python would also install pip/pip3 which we will be using for installing most of the helper modules. Make sure to update pip using:

```
python -m pip install --upgrade pip
```

### 1.1 Installing other libraries

Some of the helpful libraries are **numpy** for efficient matrix manipulation, **matplotlib/seaborn** for visualization, **pandas** for data handling and analysis. If you are interested in playing around with classical Computer Vision algorithms you can also install OpenCV (cv2). To install a library (say my\_library) all you have to do is run the following pip or pip3 command in your preferred command line shell:

```
pip install my_module
```

### 1.2 Installing Pytorch

Run the following commands:

```
pip3 install https://download.pytorch.org/whl/cu90/torch-1.0.1-cp37-cp37m-win_amd64.whl
pip3 install torchvision
```

Note: The above commands are for **Python 3.7.x** with **CUDA version 9.0**. More details on customizing installation for your version of Python and CUDA can be found at <https://pytorch.org/> and scrolling down to 'Quick Start Locally'.

## 2 Option 2: Using Anaconda

Anaconda is probably the easier way to install most packages as it will automatically install them for you. This includes latest version of Python (3.7) along with libraries numpy, scipy, pandas, matplotlib etc. You can download Anaconda installer from <https://www.anaconda.com/distribution/>. Once done open Anaconda Prompt from Start menu and run the following command

```
conda install pytorch torchvision cudatoolkit=9.0 -c pytorch
```

Note: The above commands are for **Python 3.6.x** with **CUDA version 9.0**. More details on customizing installation for your version of OS and CUDA can be found at <https://pytorch.org/> and scrolling down to 'Quick Start Locally'.

## 3 Jupyter Notebook

Jupyter can be installed using pip or Anaconda, however, Jupyter's installation guide (<https://jupyter.org/install>) recommends using Anaconda.

### 3.1 Using Anaconda

Anaconda Distribution includes Python, the Jupyter Notebook, and other commonly used packages for scientific computing and data science, and can be installed as per the instructions above. To run the notebook, execute the following command at the Command Prompt.

```
jupyter notebook
```

### 3.2 Using pip

Jupyter can be installed on Windows using pip by running the following commands:

```
python3 -m pip install --upgrade pip
python3 -m pip install jupyter
```

To start the notebook, run the following command at the command prompt:

```
jupyter notebook
```