## **Jupyter Notebook installation**

**Python** is a requirement (Python 3.3 or greater, or Python 2.7) for installing the Jupyter Notebook. To check if python is installed in your system, type following in command line

```
python --version or python3 --version
```

This will give you the version of python installed. If an error shows up instead, this means you need to install python in the system first. Follow these steps:

#### 1. Recommended method

For new users, we **highly recommend** <u>installing Anaconda</u>. Anaconda conveniently installs Python, the Jupyter Notebook, and other commonly used packages for scientific computing and data science.

Once you have downloaded and installed the latest version from above link, to run the notebook, launch from the anaconda application itself or type the following in the command line:

jupyter notebook

### 2. Alternative method

You can download and install python from <a href="https://www.python.org/downloads/">https://www.python.org/downloads/</a> Choose appropriate OS of your machine when downloading and follow instructions during installation.

As an existing Python user, you may wish to install Jupyter using Python's package manager, pip, instead of Anaconda.

First, ensure that you have the latest pip; older versions may have trouble with some dependencies:

```
pip3 install -upgrade pip
```

Then install the Jupyter Notebook using:

```
pip3 install jupyter
(Use pip if using Python 2.)
```

To run the notebook, type the following in the command line:

jupyter notebook

# Google Colab Setup

To start working with Colab you first need to log in to your google account, then go to this link <a href="https://colab.research.google.com">https://colab.research.google.com</a>.

create a new Jupyter notebook by clicking New Python3 Notebook or New Python2 Notebook

### **Change Runtime Environment:**

Click the "Runtime" dropdown menu. Select "Change runtime type". Select python2 or 3 from "Runtime type" dropdown menu.

## Install Python packages -

Use can use **pip** to install any package. For example:

```
!pip install pandas
```

## **Upload File:**

Use the menu on the left sidebar to upload files

Or write the following on the notebook itself and follow instructions on the upload prompt:

```
from google.colab import files
uploaded = files.upload()
```

## Use GPU and TPU:

Click the "Runtime" dropdown menu. Select "Change runtime type". Now select anything(GPU, CPU, None) you want in the "Hardware accelerator" dropdown menu.

See more detailed instructions at <a href="https://www.geeksforgeeks.org/how-to-use-google-colab/">https://www.geeksforgeeks.org/how-to-use-google-colab/</a>