### Offline Setup steps :

### **Installing Python3**

#### Go to the link below to download python. Select the OS and download accordingly,

<https://www.python.org/downloads/release/python-397/>

### **Virtual Environment**

**Installing pip on windows**

To check if pip is already installed on the system run:

$ pip help

If there is no response, then pip will have to be installed.

To manually install pip, securely  download get-pip.py by following this link: [get-pip.py](https://bootstrap.pypa.io/get-pip.py). Alternatively, use curl:

$ curl [https://bootstrap.pypa.io/get-pip.py -o get-pip.py](https://bootstrap.pypa.io/get-pip.py%20-o%20get-pip.py)

Then type in the following:

$ python get-pip.py

To verify installation, repeat :

$ pip help

Since Python comes in different versions, it is convenient to use a virtual environment to maintain Python packages independently for each project. You can install *virtualenv*, a tool to have isolated Python environments by following these commands[[2]](about:blank):

| $ pip install virtualenv |
| --- |

Once the *virtualenv* is installed, you can create a project directory as:

| $ mkdir cexnet |
| --- |

Now change the current directory to the new one we just made and initiate a virtual environment with name *covid19AI*:

| $ cd cexnet $ virtualenv cexnet |
| --- |

To start using the virtual environment, we activate it using:

| $ cexnet\Scripts\activate.bat |
| --- |

Download this folder CEXNET in this directory : [parent\_path of virtual env]/cexnet/cexnet

After downloading verify if these folders are present

| $ (cexnet) user@Apples-MacBook-Pro cexnet % cd CEXNET  (cexnet) user@Apples-MacBook-Pro CEXNET % ls  functions.py images runtime.py weights |
| --- |

Install these modules before executing the script.

* + pip install opencv-python
  + pip install tensorflow
  + pip install tensorflow-gpu
  + pip install scikit-image

### **Running the script**

Please make sure that the images to be tested are placed inside the images folder. The output can be seen as a .csv file.

Make sure you are in the CEXNET folder and run the runtime file using

*“python runtime.py -i <path-to-imgs-folder>”*

Further improvements required :

* Option to pass the weights as a command line parameter.
* Enhancement of user interface.