

## INSTALLING OF OPEN CV ON RASPBERRY PI

#Check whether the python version above 3.8 exists or not, if not present, download python version by going to official website.

**These are the commands which are used for installing OpenCV and get started with it,**

- `sudo nano/etc/dphys-swapfile`
- Comment or use # in the place of  
`CONF_SWAPSIZE=100`  
`CONF_SWAPSIZE=2048`
- 1. `sudo apt-get install build-essential cmake pkg-config`  
2. `sudo apt-get install libjpeg-dev libtiff5-dev libjasper-dev libpng12-dev`  
3. `sudo apt-get install libavcodec-dev libavformat-dev libswscale-dev libv4l-dev`  
4. `sudo apt-get install libxvidcore-dev libx264-dev`  
5. `sudo apt-get install libgtk2.0-dev libgtk-3-dev`  
6. `sudo apt-get install libatlas-base-dev gfortran`
- 1. `sudo apt-get install python3-dev`  
2. `sudo apt-get install python3-pip`
- 1. `wget -O opencv.zip https://github.com/opencv/opencv/archive/4.1.0.zip`  
2. `wget -O opencv_contrib.zip`  
[https://github.com/opencv/opencv\\_contrib/archive/4.1.0.zip](https://github.com/opencv/opencv_contrib/archive/4.1.0.zip)  
3. `unzip opencv.zip`  
4. `unzip opencv_contrib.zip`
- `sudo pip3 install numpy`
- 1. `cd ~/opencv-4.1.0`  
2. `mkdir build`  
3. `cd build`  
4. `cmake -D CMAKE_BUILD_TYPE=RELEASE \`  
`-D CMAKE_INSTALL_PREFIX=/usr/local \`  
`-D INSTALL_PYTHON_EXAMPLES=ON \`  
`-D OPENCV_EXTRA_MODULES_PATH=~/opencv_contrib-4.1.0/modules \`  
`-D BUILD_EXAMPLES=ON ..`
- `make -j4`(This step will take time...)
- `sudo make install && sudo ldconfig`
- `sudo reboot`

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