**Install OpenCV using Python on Raspberry Pi:**

1. sudo apt-get update

2. sudo apt-get upgrade

3. sudo apt-get install build-essential cmake pkg-config

4. sudo apt-get install libjpeg-dev libtiff5-dev libjasper-dev libpng12-dev

5. sudo apt-get install libavcodec-dev libavformat-dev libswscale-dev libv4l-dev

6. sudo apt-get install libxvidcore-dev libx264-dev

7. sudo apt-get install libgtk2.0-dev

8. sudo apt-get install libatlas-base-dev gfortran

9. sudo apt-get install python2.7-dev python3-dev

10.cd ~

11.wget -O opencv.zip https://github.com/Itseez/opencv/archive/3.1.0.zip

12.

13.

14.unzip opencv\_contrib.zip

15.wget https://bootstrap.pypa.io/get-pip.py

16.sudo python get-pip.py

17.sudo pip install virtualenv virtualenvwrapper

18.sudo rm -rf ~/.cache/pip

19.export WORKON\_HOME=$HOME/.virtualenvs

20.source /usr/local/bin/virtualenvwrapper.sh

21.echo -e "\n# virtualenv and virtualenvwrapper" >> ~/.profile

22.echo "export WORKON\_HOME=$HOME/.virtualenvs" >> ~/.profile

27.workon cv

28.pip install numpy

29.workon cv

30.cd ~/opencv-3.1.0/

31.mkdir build

32.cd build

33.cmake -D CMAKE\_BUILD\_TYPE=RELEASE \

>> ~/.profile

-D CMAKE\_INSTALL\_PREFIX=/usr/local \

-D INSTALL\_PYTHON\_EXAMPLES=ON \

-D OPENCV\_EXTRA\_MODULES\_PATH=~/opencv\_contrib-3.1.0/modules \

-D BUILD\_EXAMPLES=ON ..

34.make -j4

35.make clean

36.make

37.sudo make install

38.sudo ldconfig

39.ls -l /usr/local/lib/python2.7/site-packages/

40.cd~/.virtualenvs/cv/lib/python2.7/site-packages/

41.ln -s /usr/local/lib/python2.7/site-packages/cv2.so cv2.so

42.source ~/.profile

43.workon cv

44.python

>>> import cv2

>>> cv2.

'3.1.0'

version

4rm -rf opencv-3.1.0 opencv\_contrib-3.1.0