OpenCV4 Installation Guide

Step 1: install required apt packages

```
sudo apt -y update
sudo apt -y upgrade
sudo apt -y install build-essential cmake pkg-config
sudo apt -y install libjpeg-dev libtiff5-dev libpng-dev
sudo apt -y install libavcodec-dev libavformat-dev libswscale-dev libavresample-dev
sudo apt -y install libdc1394-22-dev libxvidcore-dev libx264-dev
sudo apt -y install libxine2-dev libv4l-dev v4l-utils
sudo apt -y install libgstreamer1.0-dev libgstreamer-plugins-base1.0-dev
sudo apt -y install libatlas-base-dev libeigen3-dev gfortran
sudo apt -y install python3-dev python3-numpy libtbb2 libtbb-dev
```

Step 2: build and install

```
cd ~
mkdir OpenCV4
cd OpenCV4
git clone -b 4.3.0 https://github.com/opencv/opencv
git clone -b 4.3.0 https://github.com/opencv/opencv_contrib
cd opencv
mkdir build
cd build

cmake ₩
-D CMAKE_BUILD_TYPE=Release ₩
-D CMAKE_INSTALL_PREFIX=/usr/local ₩
-D BUILD_WITH_DEBUG_INFO=OFF ₩
-D BUILD_EXAMPLES=ON ₩
-D BUILD_opencv_python3=ON ₩
-D INSTALL_PYTHON_EXAMPLES=ON ₩
-D OPENCV_ENABLE_NONFREE=ON ₩
-D OPENCV_EXTRA_MODULES_PATH=../../opencv_contrib/modules ₩
-D OPENCV_GENERATE_PKGCONFIG=ON ₩
-D WITH_TBB=ON ₩
-D WITH_GTK=ON ₩
..

make -j`nproc`
sudo make install
sudo ldconfig
```