

OpenCV :

<https://www.learnopencv.com/install-opencv3-on-ubuntu/>

Git Fares project (need to ask for access from fares):

https://github.com/faresfaresCS/ORB_SLAM2.git

Follow the instructions! And install ros which is marked as optional

It requires multi cmake and make in order to run properly, orb_slam is highly dependent on outside libraries.

Hard coded path:

When you run cmake and make a lot of files are created with absolute path.

We need to change some of the paths to our own file structure:

Nano the changeFileDir.sh and make sure the path after \$pwd in line 5 is the correct path in your case.

Run changeFileDir.sh

Run "grep -r /home/fares/ ~/ORB_SLAM2"

You will get results, so check with fares you don't have any junk left.

In hidden file .bashrc which located in ~ path

Paste at the end of the file the following line (change the path to your path):

```
source /opt/ros/melodic/setup.bash
```

```
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/usr/local/lib
```

```
export
```

```
ROS_PACKAGE_PATH=${ROS_PACKAGE_PATH}:/home/rbdstudent/ORB_SLAM2/g2o/build/
```

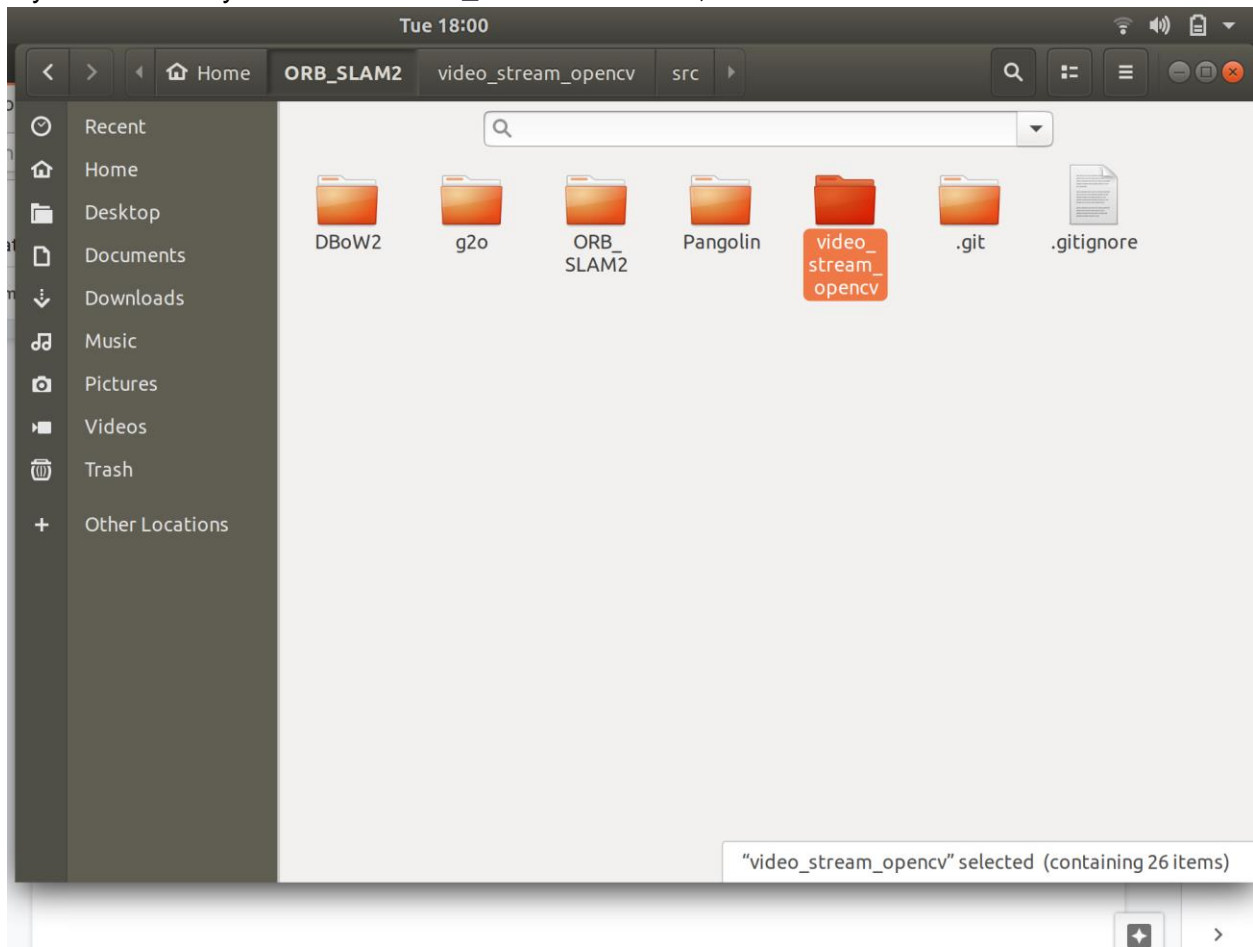
```
ORB_SLAM2/Examples/ROS
```

```
export
```

```
ROS_PACKAGE_PATH=${ROS_PACKAGE_PATH}:/home/rbdstudent/ORB_SLAM2/ORB_SLAM2/Examples/ROS
```

Extract the video_stream_opencv.zip folder outside of the ORB_SLAM2 folder.

If you will notice you will have ORB_SLAM2 in 2 level, the first level should look like this:



Cmake and make video_stream_opencv and video_stream_opencv/build

Create the aliases from "aliases command" file in the project, double check the path's

Run the videostream alias