

- Ubuntu 16.04.4 기준, System Update/Upgrade 금지
- `sudo apt-get update`

1. ROS & Realsense 설치, bash 설치기준

(http://www.kirobotics.com/w/index.php?title=Gogo:Proj_DevelopmentOfCoreTechnology_Software_Install_Manual)

realsense 동작확인

```
$ roslaunch ~/catkin_ws/install/share/realsense2_camera/launch/rs_rgbd.launch
```

```
$ rosrn rqt_image_view rqt_image_view
```

/camera/color/image_raw 선택 후 카메라 연결 확인

2. Software package and ROS wrappers of the Aruco Augmented Reality marker detector library.

(https://github.com/pal-robotics/aruco_ros)

```
$ sudo apt-get install ros-kinetic-aruco-ros
```

아래 KI_aruco_ros.launch 로 저장

```
=====
```

```
<launch>
```

```
<arg name="markerId" default="6"/>
```

```
<arg name="markerSize" default="0.04"/> <!-- in meter -->
```

```
<arg name="eye" default="left"/>
```

```
<arg name="marker_frame" default="marker_frame"/>
```

```
<arg name="ref_frame" default=""/> <!-- leave empty and the pose will be published wrt  
param parent_name -->
```

```
<arg name="corner_refinement" default="LINES" /> <!-- NONE, HARRIS, LINES, SUBPIX -->
```

```

<node pkg="aruco_ros" type="single" name="aruco_single">
  <remap from="/camera_info" to="/camera/color/camera_info" />
  <remap from="/image" to="/camera/color/image_raw" />

  <param name="io_method" value="mmap"/>
  <param name="image_is_rectified" value="True"/>
  <param name="marker_size" value="$(arg markerSize)"/>
  <param name="marker_id" value="$(arg markerId)"/>
  <param name="reference_frame" value="$(arg ref_frame)"/> <!-- frame in which the marker
  pose will be referred -->
  <param name="camera_frame" value="base_link"/>
  <param name="marker_frame" value="$(arg marker_frame)" />
  <param name="corner_refinement" value="$(arg corner_refinement)" />
</node>

</launch>

=====

```

3. roslaunch KI_aruco_ros.launch

rqt_image_view 에서 /aruco_ros/result 선택 및 마커 인식 확인

