

3.AR vision

There are a total of 12 AR effects in this case:

```
["Triangle", "Rectangle",  
"Parallelogram", "WindMill", "TableTennisTable", "Ball", "Arrow", "Knife",  
"Desk", "Bench", "Stickman", "ParallelBars"]
```

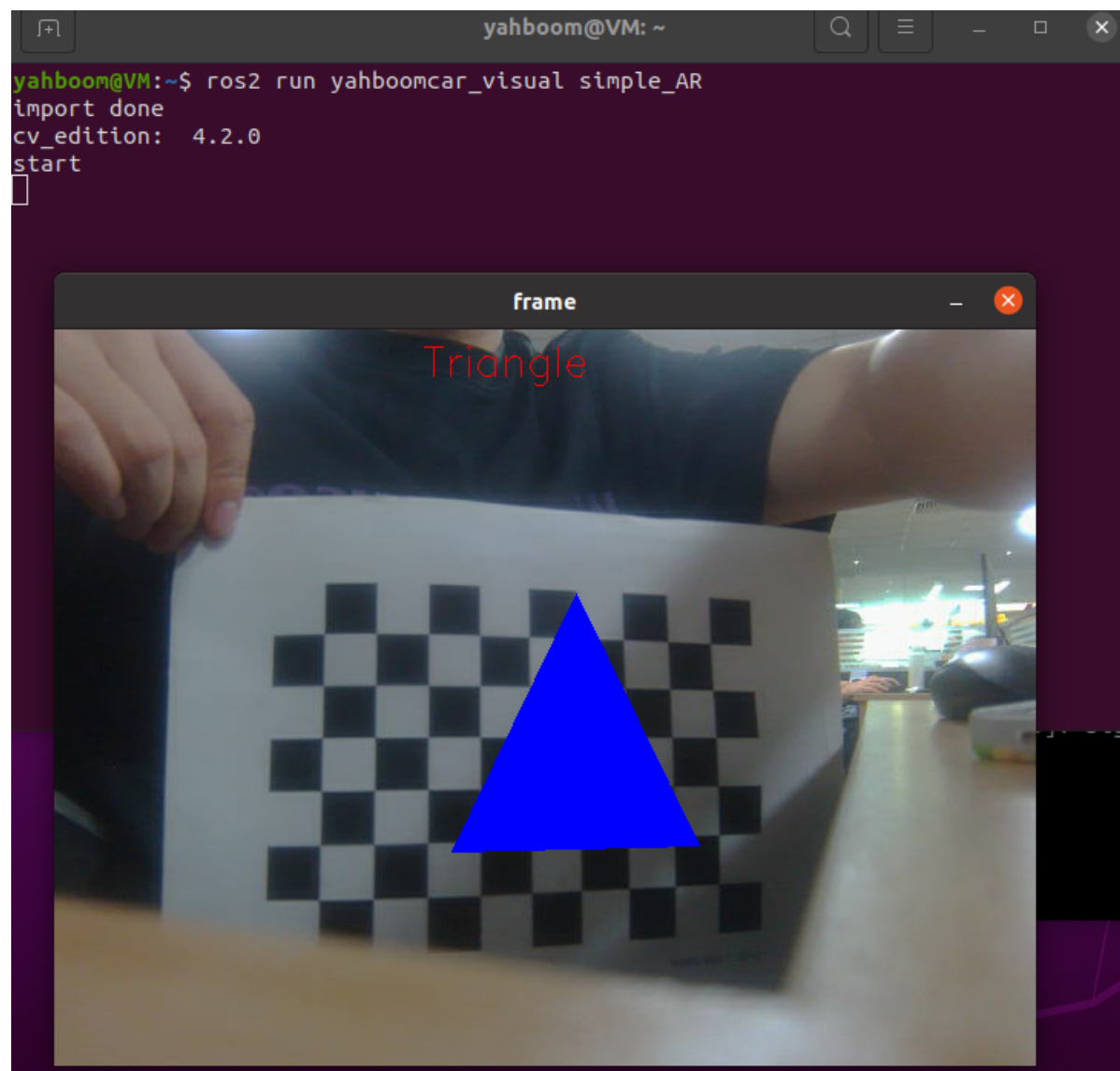
1. Start up

Code path:

```
~/orbbec_ws/src/yahboomcar_visual/yahboomcar_visual/simple_AR.py
```

Input following command to start camera:

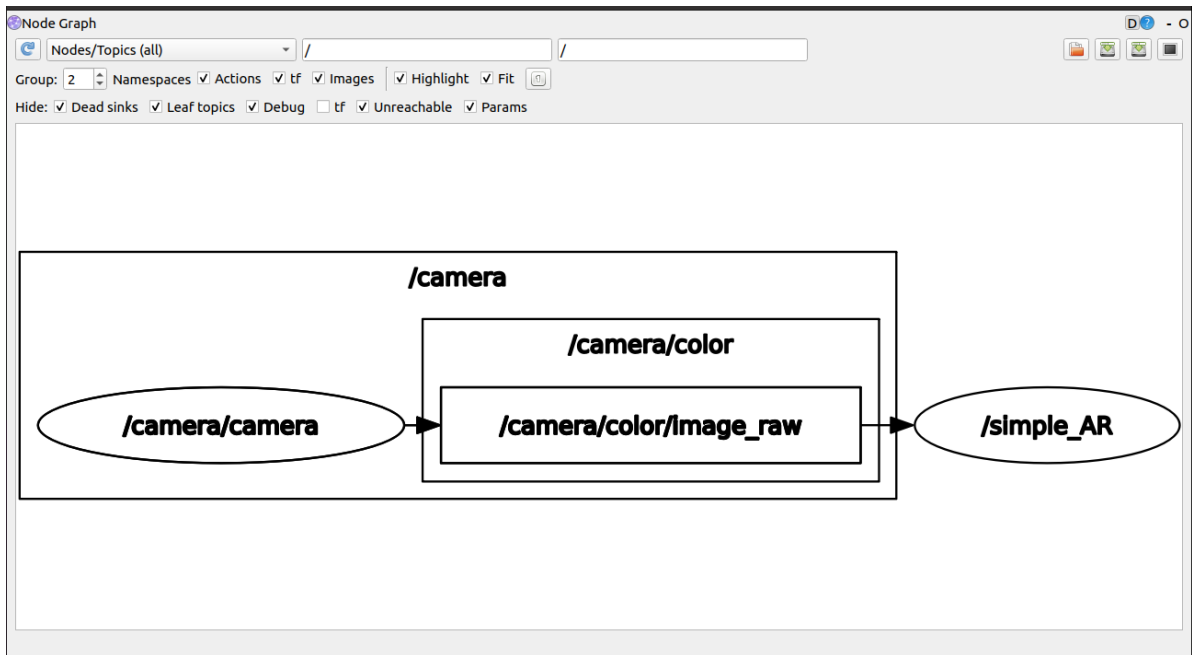
```
ros2 launch orbbec_camera dabai_dcw2.launch.py  
ros2 run yahboomcar_visual simple_AR
```



【f】 Switch between different effects.

To view communication between topics, input following command:

```
ros2 run rqt_graph rqt_graph
```



View topic data list, input following command:

```
ros2 topic list
```

```
yahboom@VM:~$ ros2 topic list
/Graphics_topic
/camera/color/camera_info
/camera/color/image_raw
/camera/depth/camera_info
/camera/depth/image_raw
/camera/depth/points
/camera/depth_registered/points
/camera/ir/camera_info
/camera/ir/image_raw
/parameter_events
/rosout
/simpleAR/camera
/tf
/tf_static
```

- **/Graphics_Topic**: The topic name of the effect, and the effect that needs to be recognized for subscription.
- **/simpleAR/camera**: The topic name of the image, publishing the image.

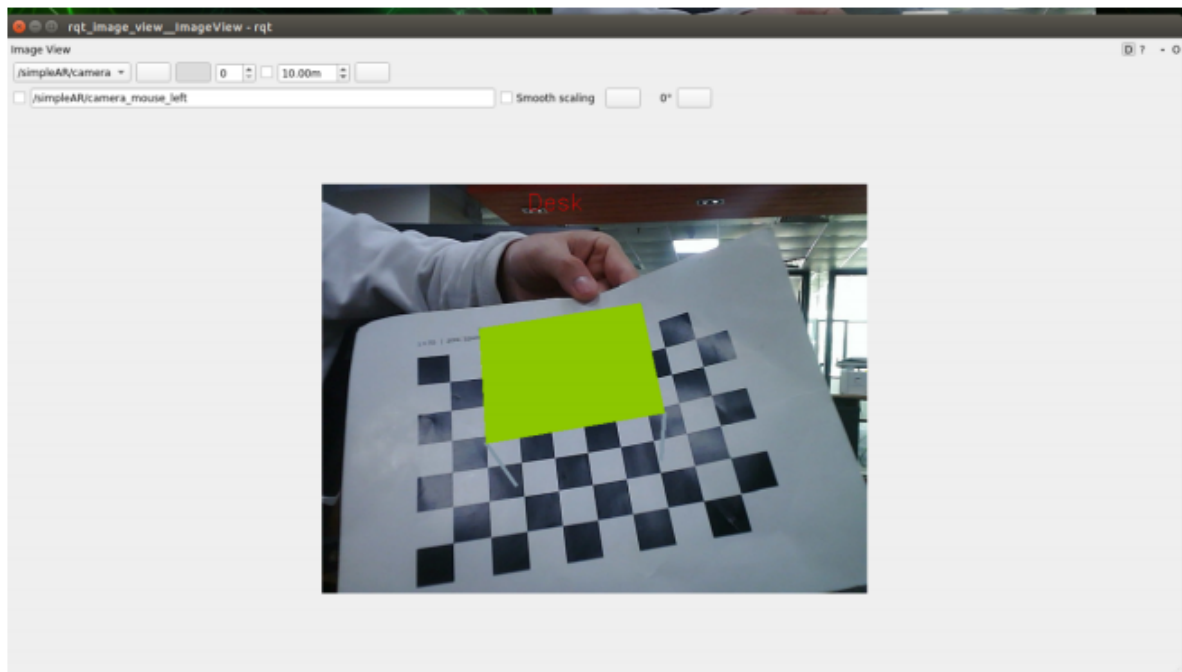
You can modify the effect by using the following command.

For example, modify to Desk and input commands at the terminal

```
ros2 topic pub /Graphics_topic std_msgs/msg/String "data: Desk"
```

We can use `rqt_image_view` to view the published images, input commands at the terminal

```
ros2 run rqt_image_view rqt_image_view
```



Select/simpleAR/camera in the top left corner of the topic to view the image.