

6.yolov8 + deep sort target following

The function of this section is mainly to combine the functions of the previous two sections to control our car to follow the target through target tracking.

Our code in this section includes:

```
#yolov8+deep_sort multi-batch target tracking
/home/yahboom/YBAMR-COBOT-EDU-
00001/src/yahboom_navrobo_object_detection/scripts/yolov8/yahboom_navrobo_object_
_detection.py
```

```
#Target following control program
/home/yahboom/YBAMR-COBOT-EDU-
00001/src/yahboom_navrobo_object_detection/scripts/yolov8/flower_controller.py
```

Running method:

This course will control the movement of the chassis, and we need to ensure that our chassis starts successfully.

We enter the code in the terminal:

```
sudo supervisorctl restart all
```

Then enter the command in the terminal:

```
cd /home/yahboom/YBAMR-COBOT-EDU-
00001/src/yahboom_navrobo_object_detection/scripts/yolov8

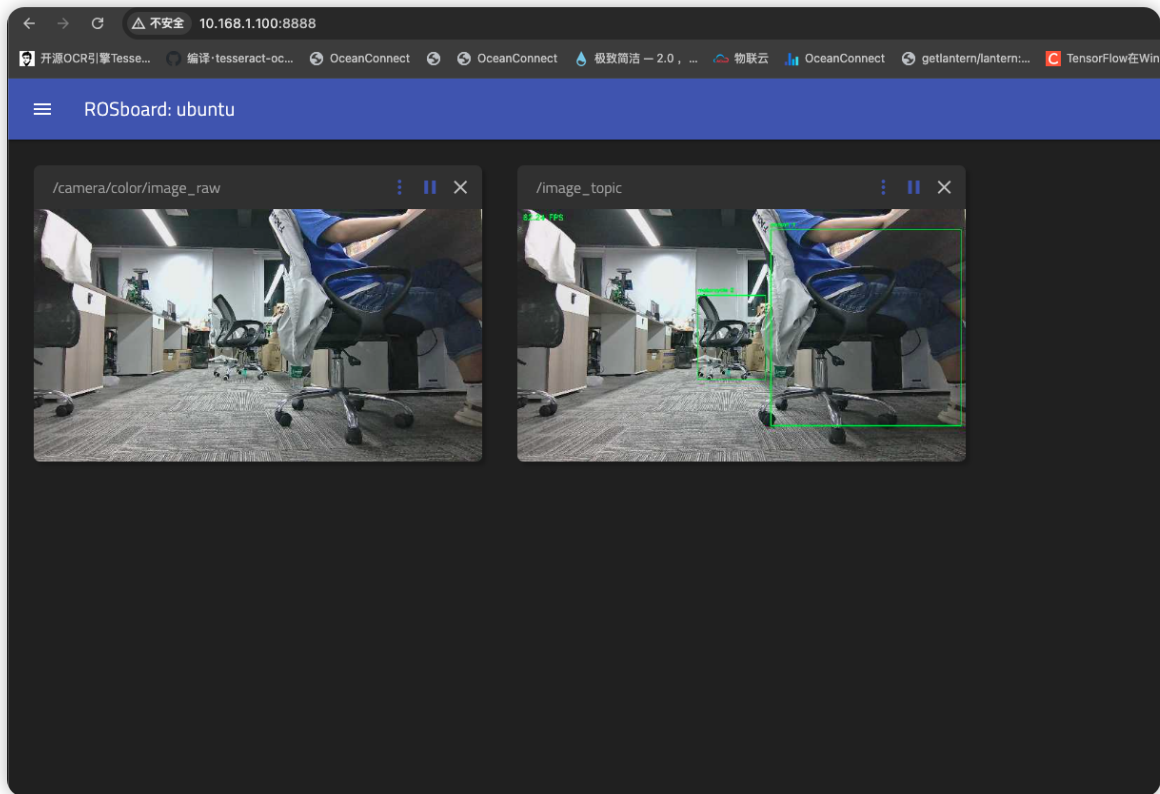
python /home/yahboom/YBAMR-COBOT-EDU-
00001/src/yahboom_navrobo_object_detection/scripts/yolov8/yahboom_navrobo_object_
_detection.py
```

Reopen a terminal and enter the command in the terminal:

```
cd /home/yahboom/YBAMR-COBOT-EDU-
00001/src/yahboom_navrobo_object_detection/scripts/yolov8

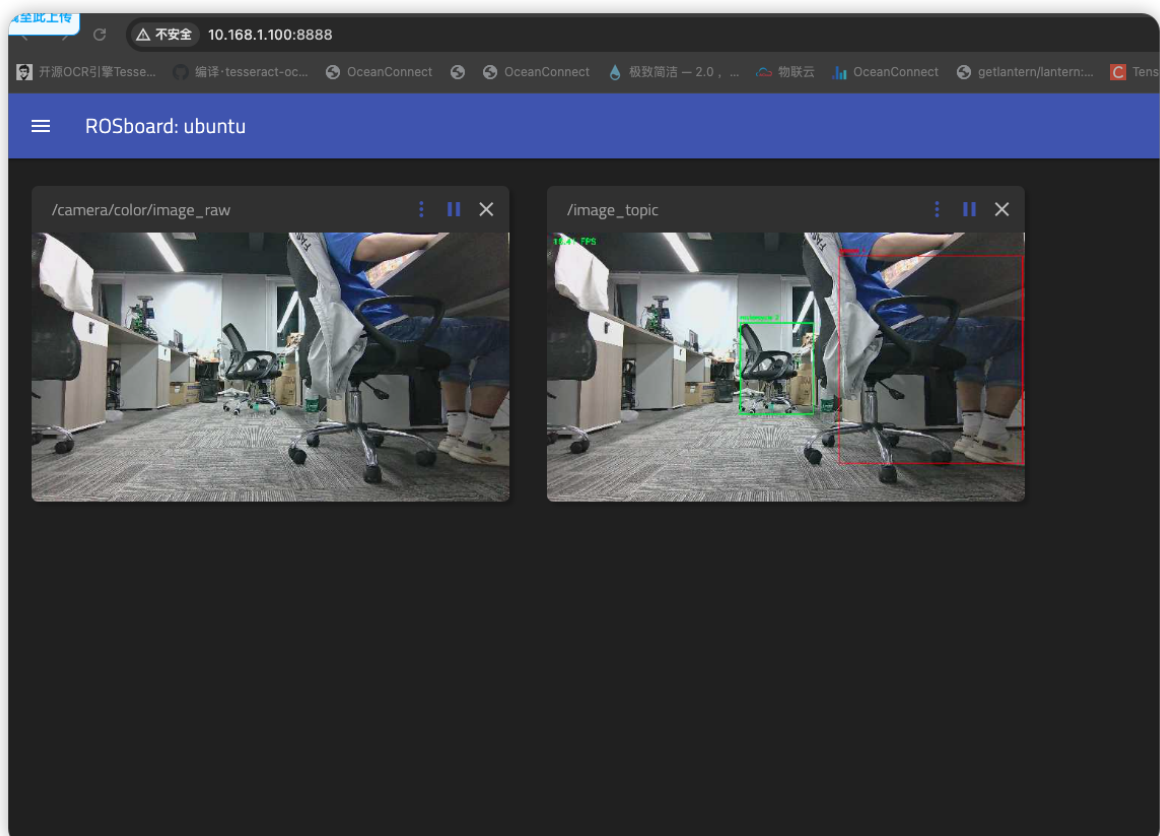
python /home/yahboom/YBAMR-COBOT-EDU-
00001/src/yahboom_navrobo_object_detection/scripts/yolov8/flower_controller.py
```

As shown below:



Then we open another terminal and enter the command in the terminal:

```
cd /home/yahboom/YBAMR-COBOT-EDU-00001/src/yahboom_navrobo_object_detection/scripts/yolov8  
  
rostopic pub -1 /tracked_id std_msgs/Int32 "data: 1"  
#1 represents the ID number of the target to be tracked. If you want to track  
other targets, change other IDs
```



Then we move left and right, and the vehicle will move with the movement of the person, so that the target is in the center of the picture as much as possible. At the same time, if the vehicle radar detects that the distance to the person is greater than 2 meters, it will control the vehicle to move forward. If it is less than 2 meters, the vehicle will move backward.