

Target tracking algorithm

Locating objects in consecutive frames of a video is called tracking. In OpenCV, you can use traditional target tracking algorithms (such as mean tracking, Kalman filtering, etc.) Or target trackers based on deep learning (such as MOSSE, CSRT, etc.) for target tracking. Deep learning object trackers generally perform better in accuracy and robustness

1. Use

Code path: ~/yahboomcar_ws/src/opencv_apps/launch

- Start the camera

```
roslaunch yahboomcar_visual opencv_apps.launch img_flip:=false
```

- img_flip parameter: whether the image needs to be flipped horizontally, the default is false.

The [usb_cam-test.launch] file opens the [web_video_server] node by default, and you can directly use the [IP:8080] web page to view images in real time.

- Start the corner detection function of Opencv_apps

```
roslaunch opencv_apps camshift.launch # target tracking  
algorithm
```

The debug_view for some functions is disabled, and there is no screen appearing. You can view the effect in the following two ways.

The reason for closing debug_view is that it will generate errors on the terminal, but the actual effect has not been affected

- Local View Screen

Enter the following command to select the corresponding topic

```
rqt_image_view
```

- LAN viewing screen

Enter IP+port in the browser, for example:

```
192.168.2.150:8080 # IP是宿主机的IP
```

2. LAN viewing screen

You can see an adjustable window appear on the screen, followed by a red frame.

