23.LK optical flow algorithm

1. Use

Source code launch file path：~/jetcobot_ws/src/opencv_apps/launch

Step 1: Start camera

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

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

The 【usc_cam-test.launch】 file defaults to the 【web-video_user】 node, which allows real-time viewing of images directly using the 【IP: 8080】webpage.

Step 2: Start OpenCv-apps feature

```
roslaunch opencv_apps lk_flow.launch                    # LK optical flow
algorithm
```

Each feature case will have a parameter [debug-view], boolean type, whether to use Opencv to display images, default display.

If it is not necessary to display, set it to [False], for example

```
roslaunch opencv_apps contour_moments.launch debug_view:=False
```

However, after starting in this way, some cases may not be displayed through other means because in the source code, if the debug-view is set to False, the image processing will be turned off.

2. Display method

- rqt_image_view

Input the following command to select the corresponding topic

```
rqt_image_view
```

- opencv

The system defaults to display, no further processing is required.

- View webpage

In the same local area network, enter IP+port in the browser, for example:

```
192.168.2.116:8080
```

Specific IP address, use your current robot's IP address.

3. Effect display