## 12. General contour detection

## 12.1, Use

Source code launch file path: /opt/ros/noetic/share/opencv\_apps/launch

Step 1: Start the camera

roslaunch ascam\_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 the image in real time.

Step 2: Start the general contour detection function of Opencv\_apps

roslaunch opencv\_apps general\_contours.launch # General contour detection

Each function case will have a parameter [debug\_view], Boolean type, whether to use Opencv to display the image, the default is displayed.

If you don't need to display, set it to [False], for example

roslaunch opencv\_apps general\_contours.launch debug\_view:=False

However, after starting in this way, some cases may not be displayed in other ways, because in the source code, some [debug\_view] is set to [False], which will turn off image processing.

## 12.2, Display method

rqt\_image\_view

Enter the following command and select the corresponding topic

rqt\_image\_view

opencv

The system displays by default, no processing is required.

Web viewing

(Under the same LAN) Enter IP+port in the browser, for example:

192.168.2.116:8080

For specific IP, use your current virtual machine IP.

## 12.3, Effect display

Provide threshold adjustment.

