A program has been installed in the RDK-X3 system to test the data path of the USB camera
The sequence will read the image data of USB camera in real time, then run the visual detection algorithm, and finally output the video and algorithm results through HDMI.

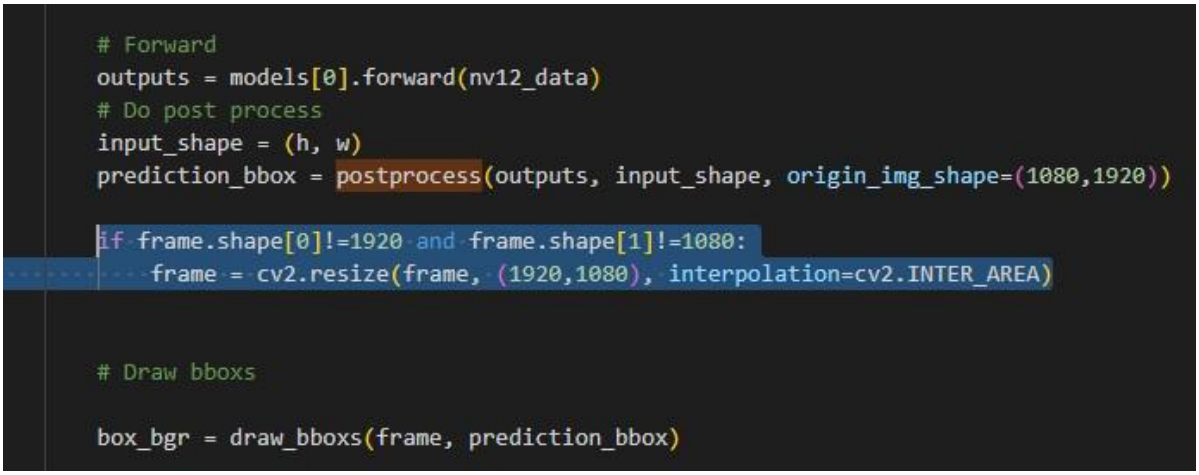
Because the RDK-X3 uses a 1080P camera using USB routines, and Astra Pro RGB camera supports up to 1280*720.

If we run the routine code directly, we will report an error because of the display resolution, so we need to add a resolution determination in the source code.

Code path:

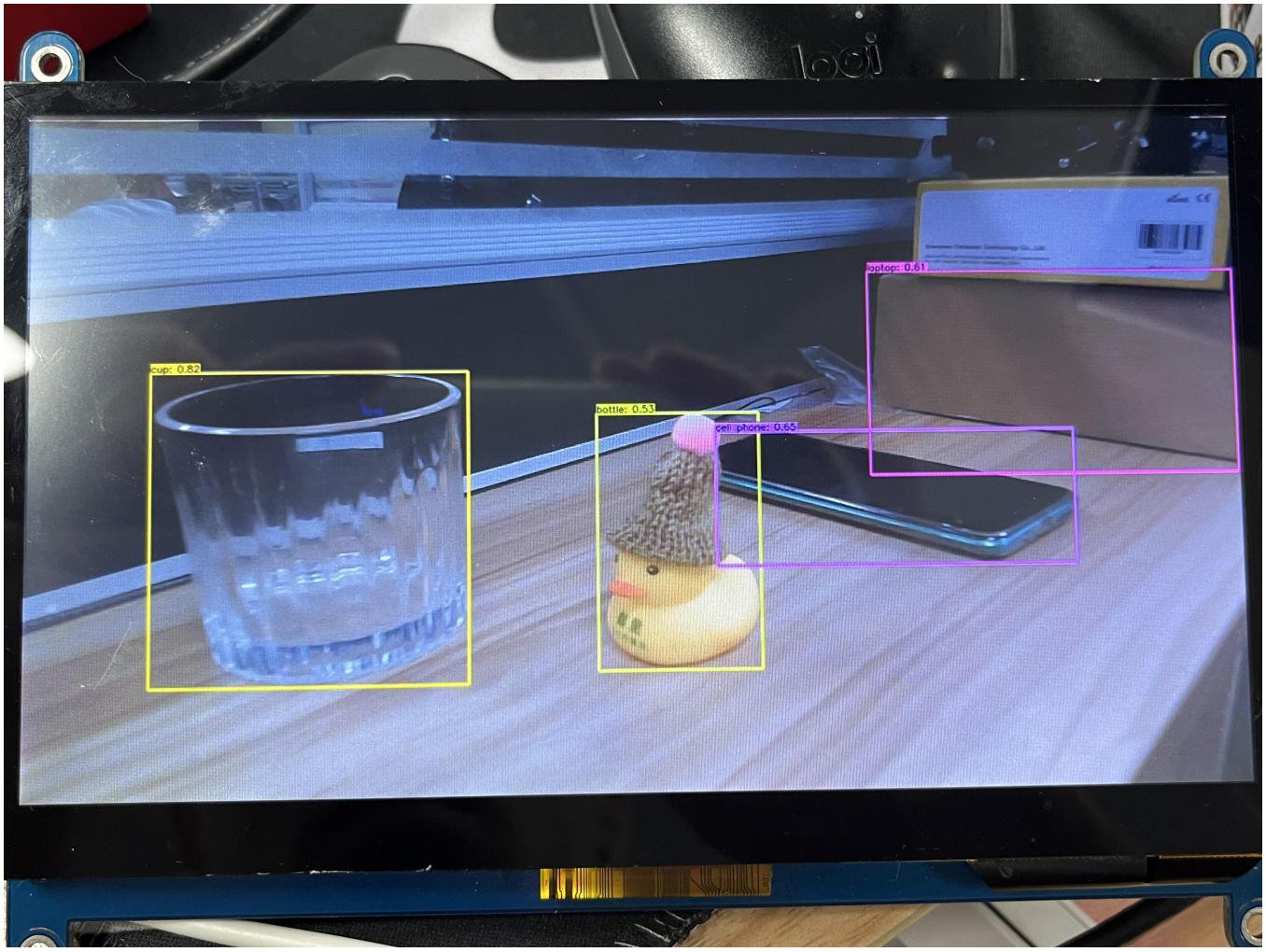
```
/app/ai_inference/02_usb_camera_sample/usb_camera_fcos.py
```

```
if frame.shape[0]!=1920 and frame.shape[1]!=1080:
    frame = cv2.resize(frame, (1920,1080), interpolation=cv2.INTER_AREA)
```



Environmental preparation:
1. Connect the USB camera to the development board correctly and confirm the generation of the/dev/video8 device node.
2. Connect the development board and display through HDMI cable,
Enter the following command.

```
sunrise@ubuntu:~$ cd /app/ai_inference/02_usb_camera_sample/
sunrise@ubuntu:/app/ai_inference/02_usb_camera_sample$ sudo python3
./usb_camera_fcos.py
```



Tip: After executing the above procedure, hdmi will display the video image and the visualization function will be hidden.
Enter the following two commands to restore the visualization interface.

```
sudo bash -c "echo start > /sys/devices/virtual/graphics/iar_cdev/iar_test_attr"
sudo bash -c "echo enable2 >
/sys/devices/virtual/graphics/iar_cdev/iar_test_attr"
```