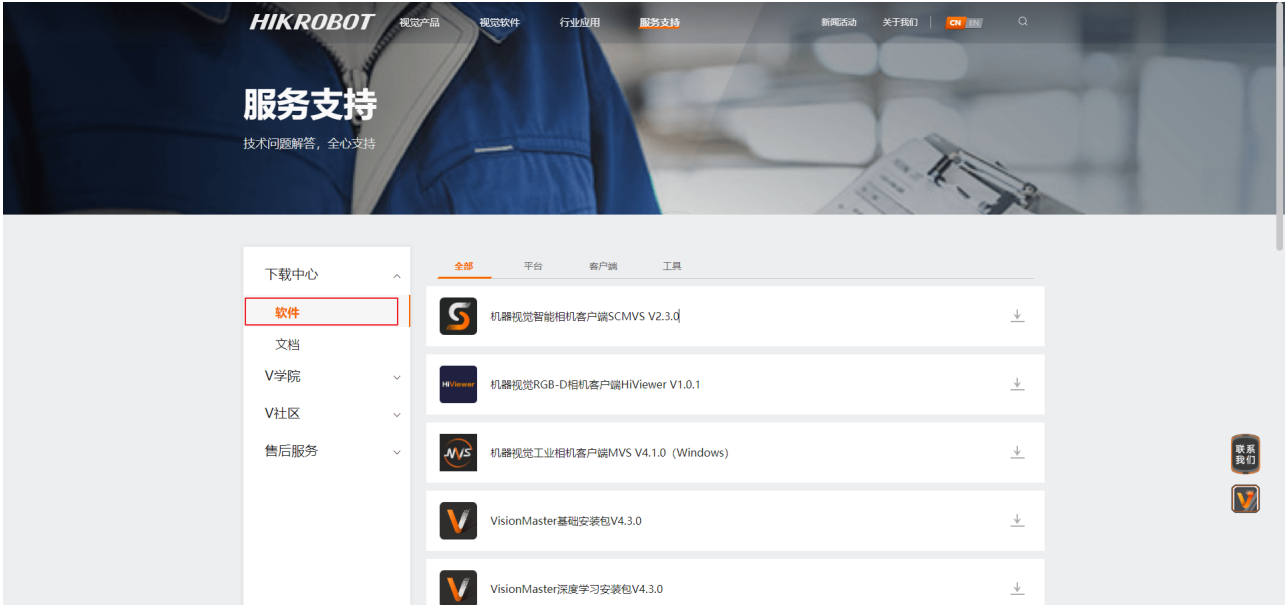
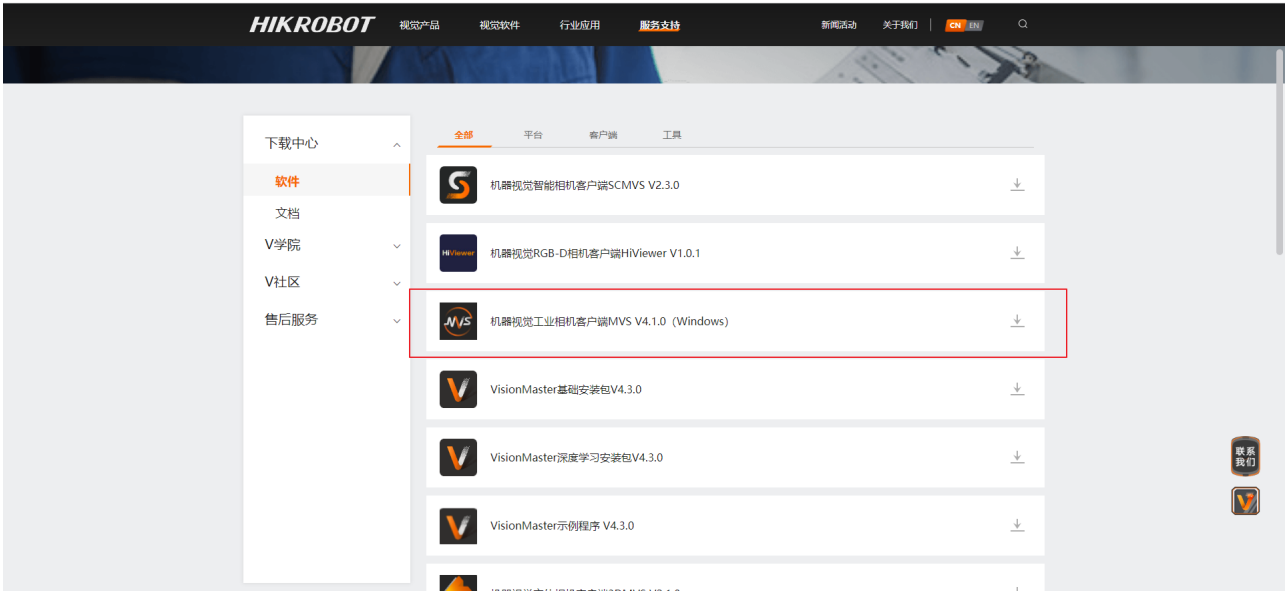


1：安装海康相机驱动

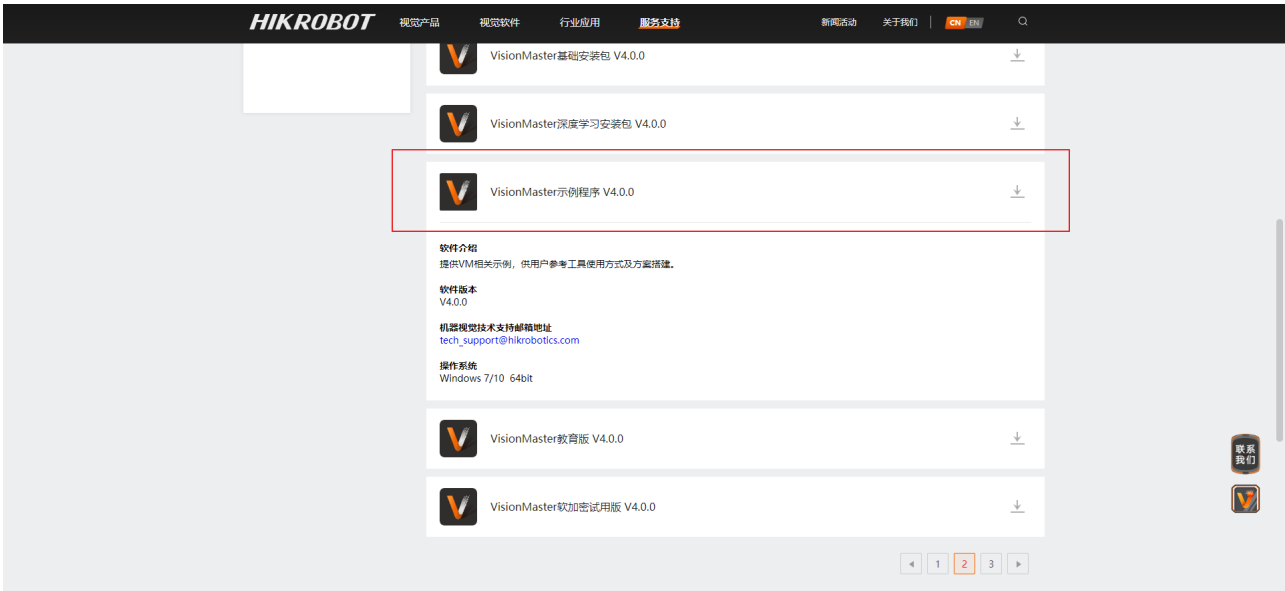
- 1. 海康下载中心，如下图所示



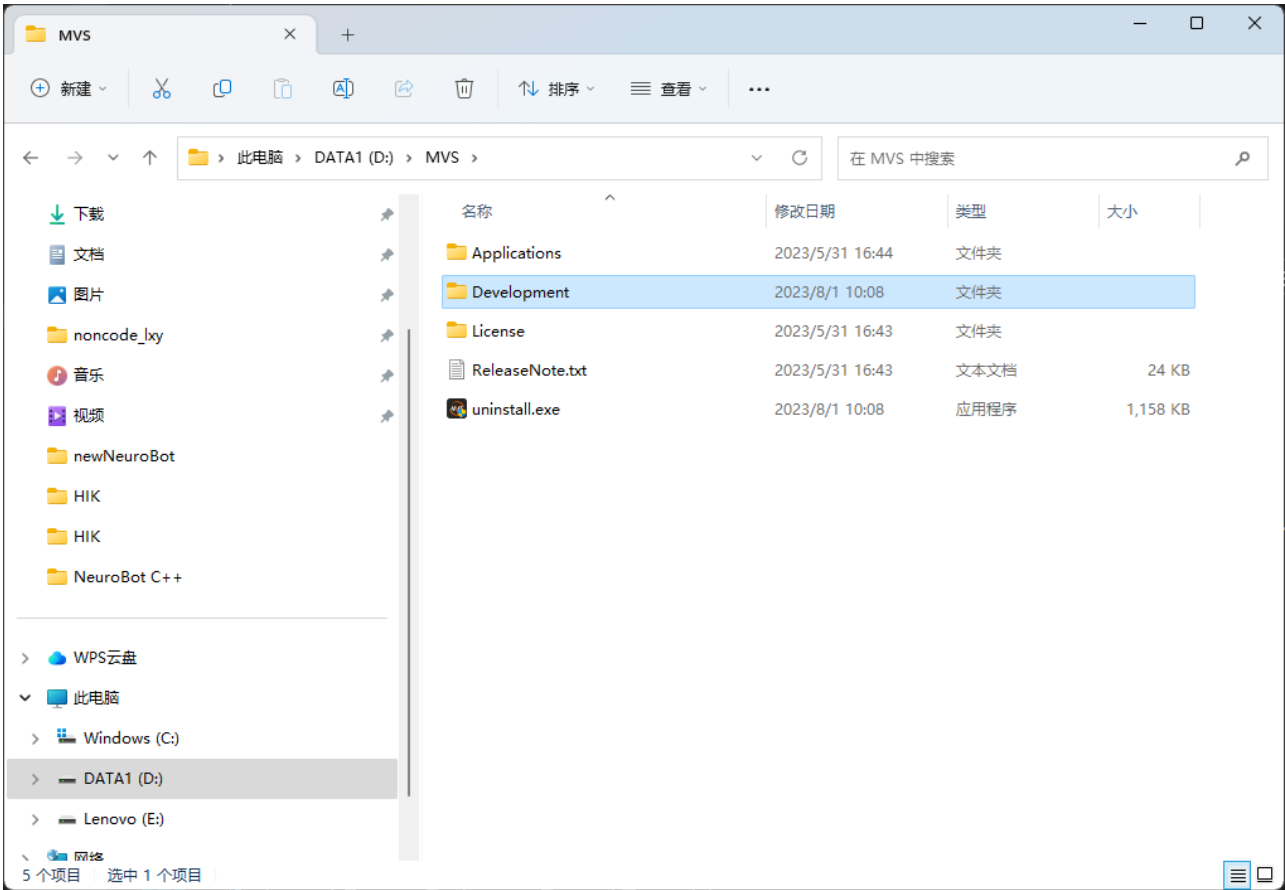
- 2. 下载MVS (客户端)



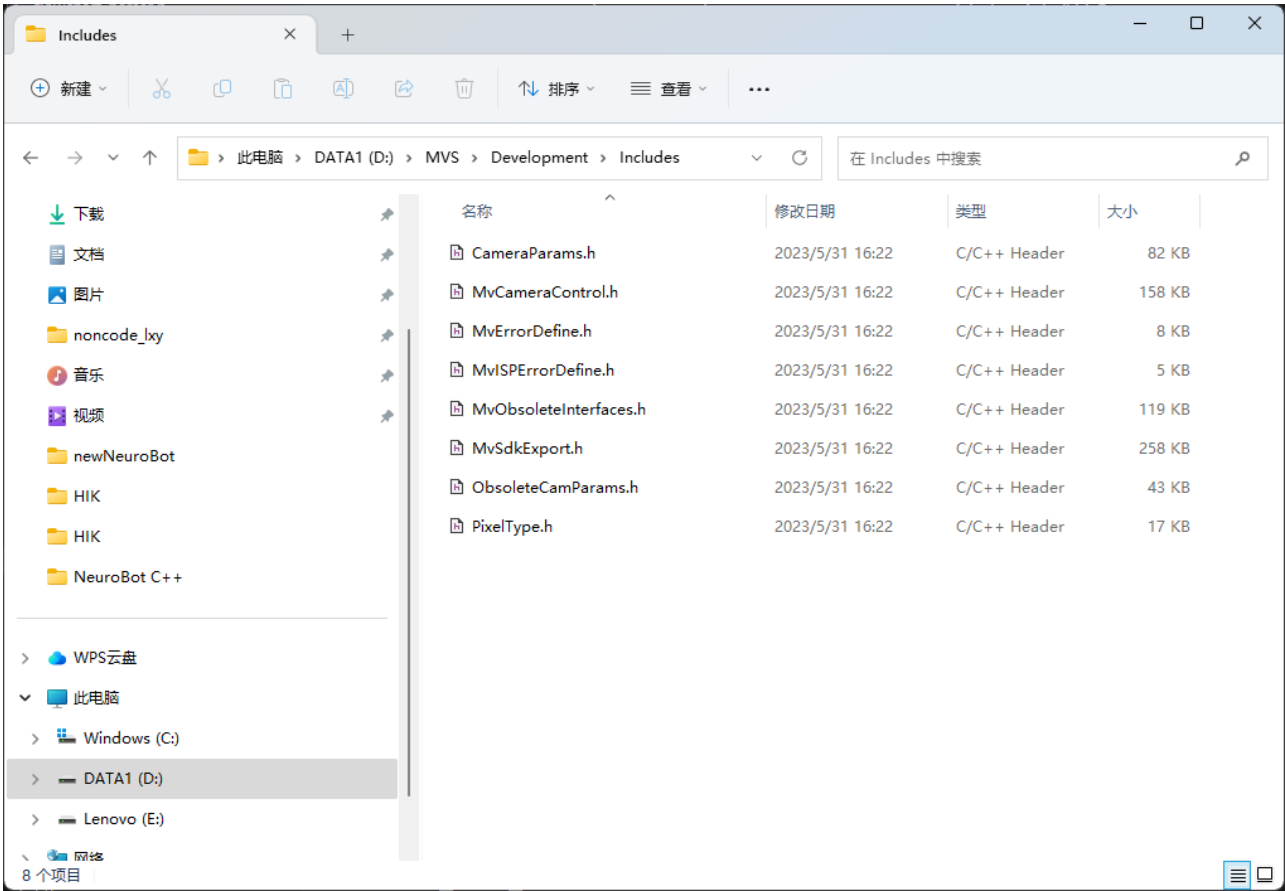
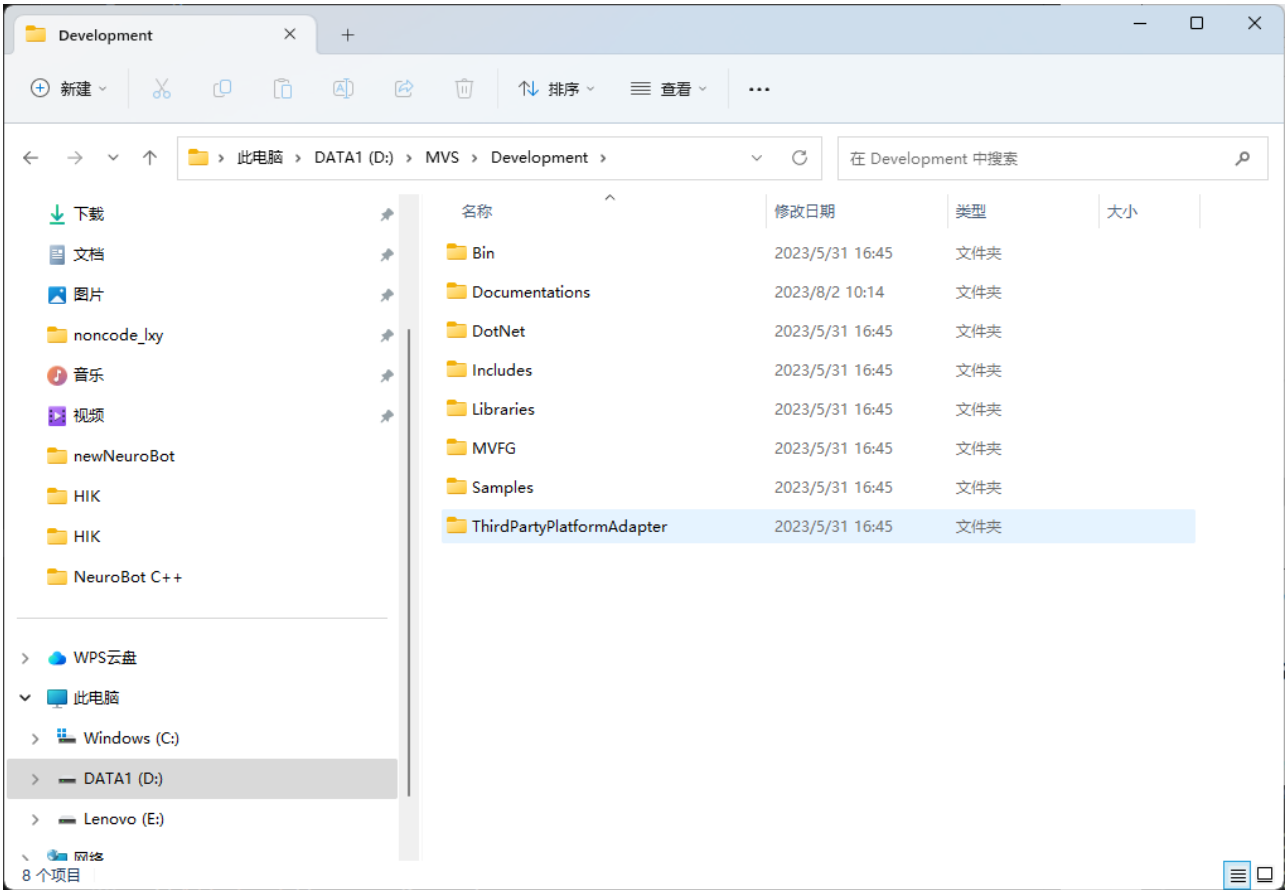
3. 下载简单示例程序 (SDK)



下载完成后文件夹如下图所示



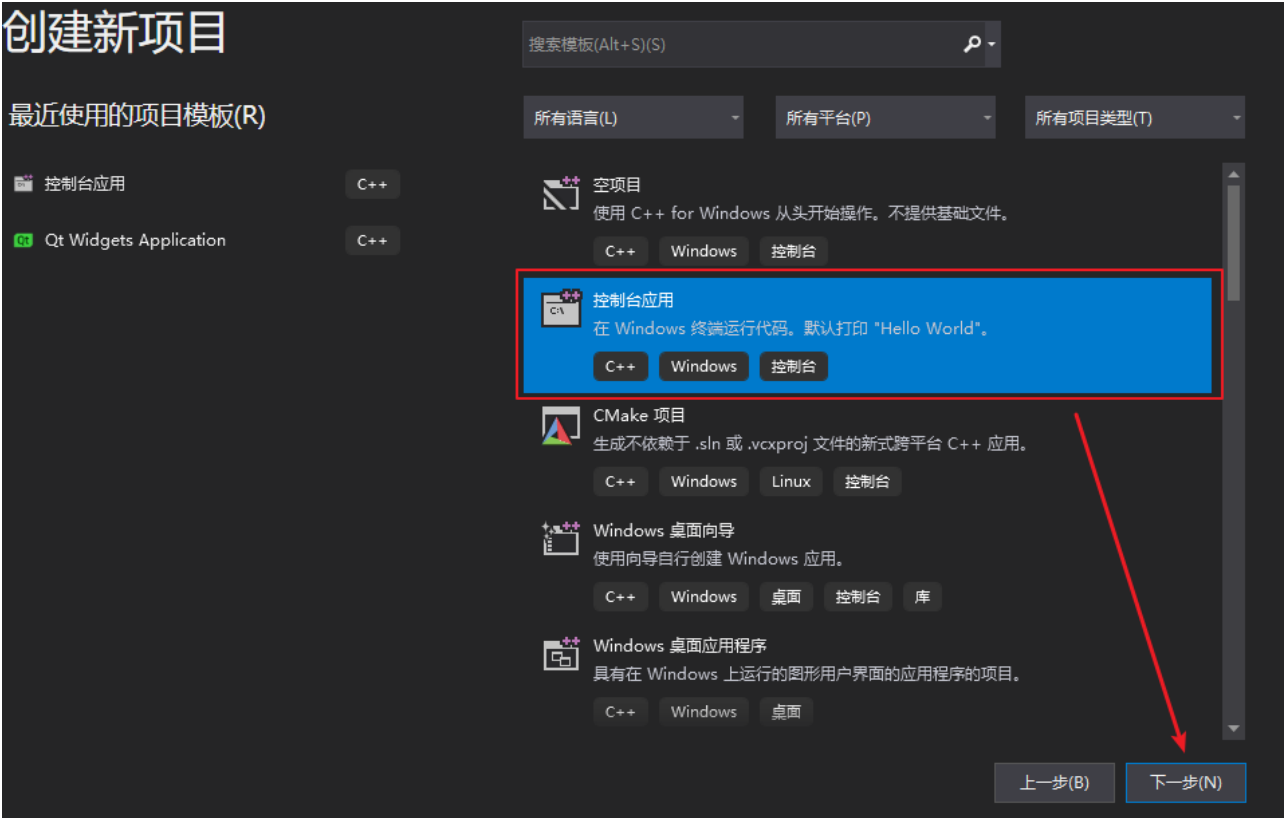
- 顺序点击Development文件夹 · Includes文件夹



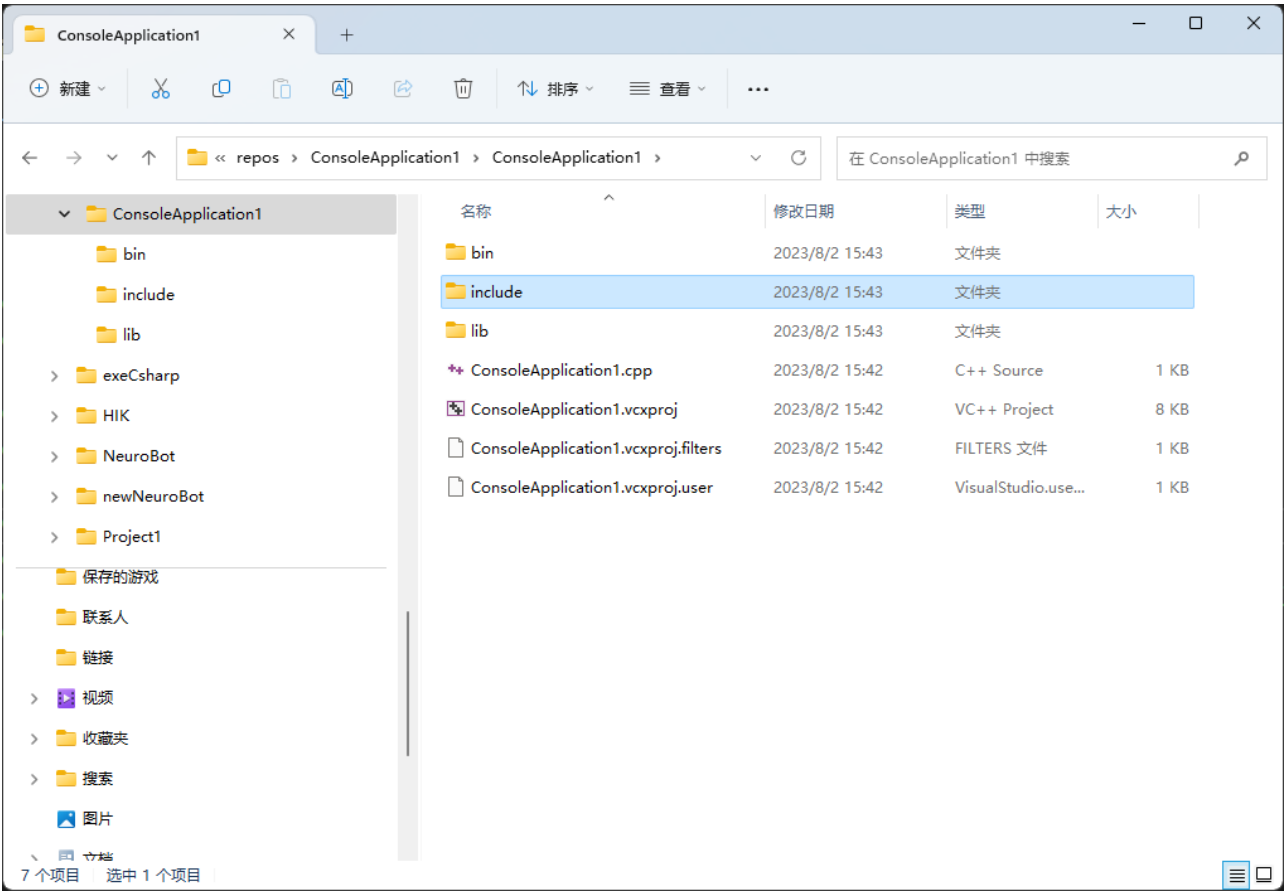
- 我们在开发中需要使用这8个头文件

2：配置 Visual Studio

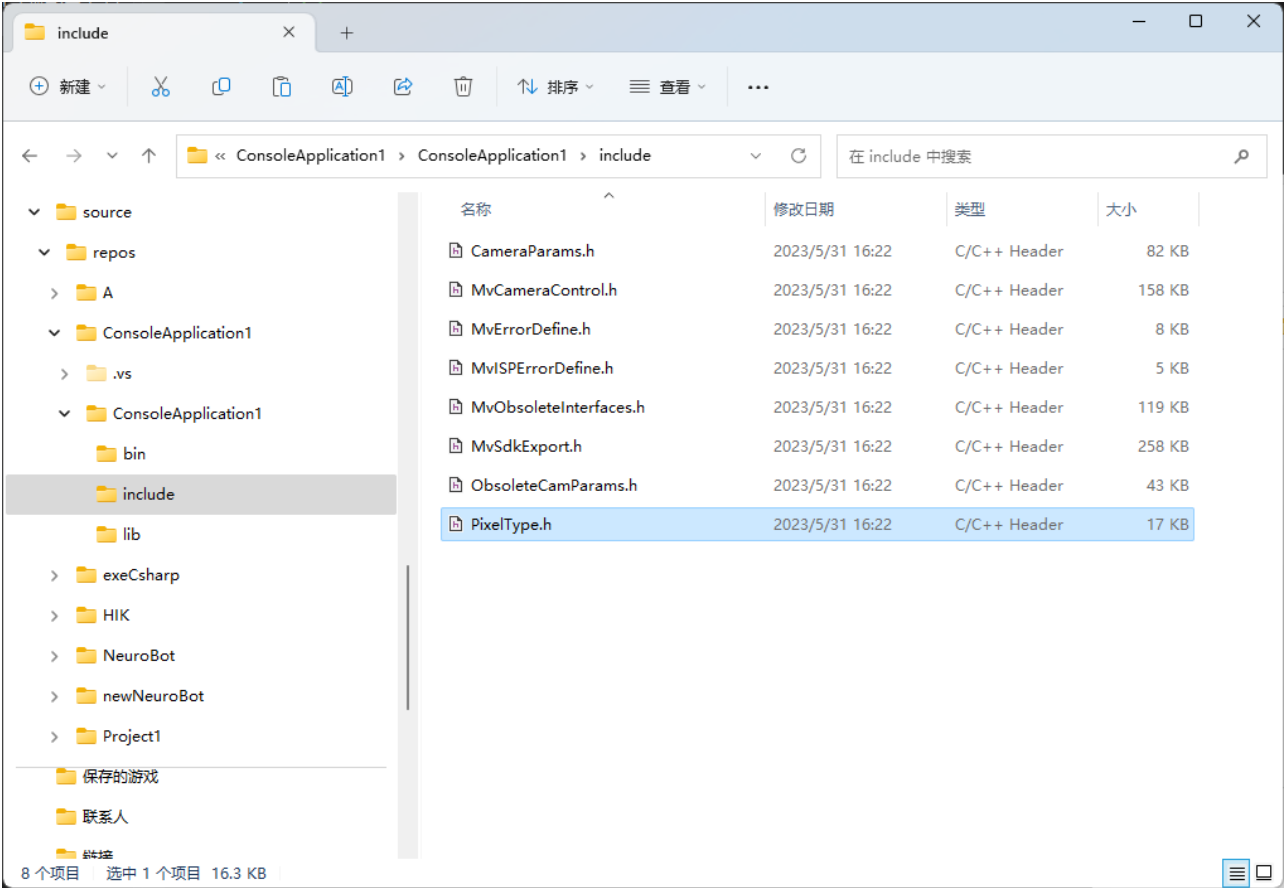
1. 新建C++控制台应用



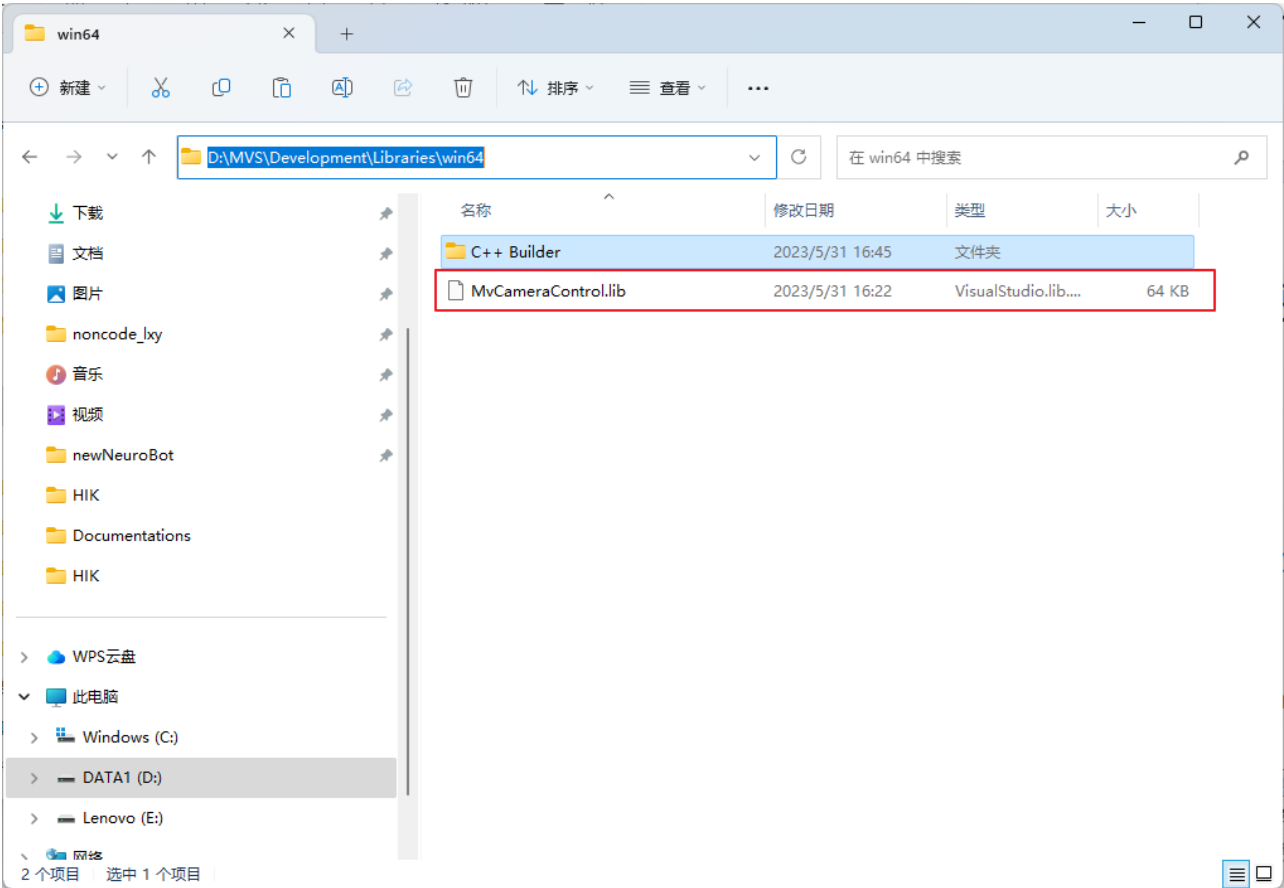
2. 在该项目下，新建立lib， bin， include三个文件夹



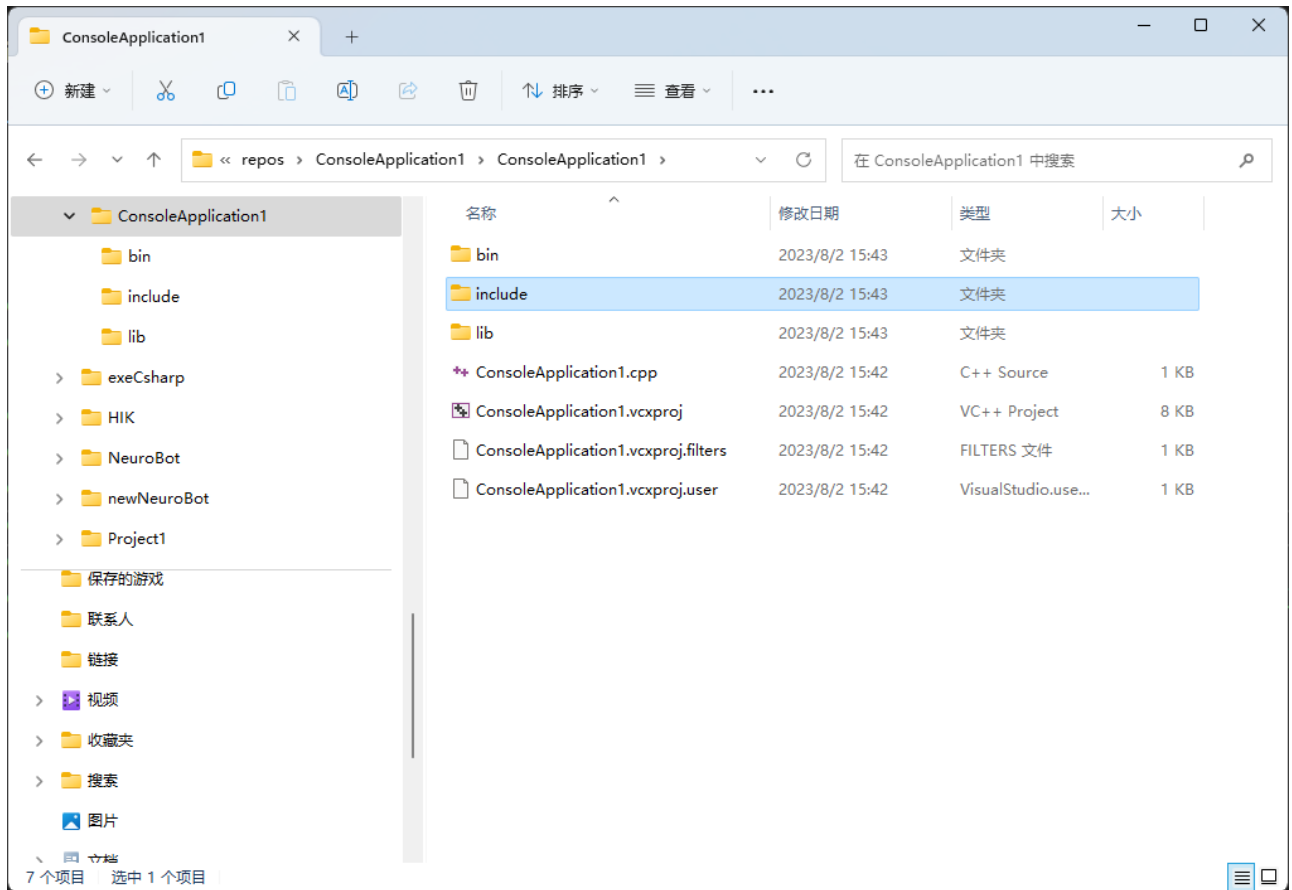
- 3. 将之前8个头文件放在include文件夹中，以及C++ SDK包中的include文件夹



- 4. 把Development\Libraries\Win64 下的 MvCaemraControl.lib 放在lib文件夹中，以及C++ SDK包中的lib文件夹



- 5. 将C++ SDK包中的bin文件夹下所有文件复制到现在项目bin目录下



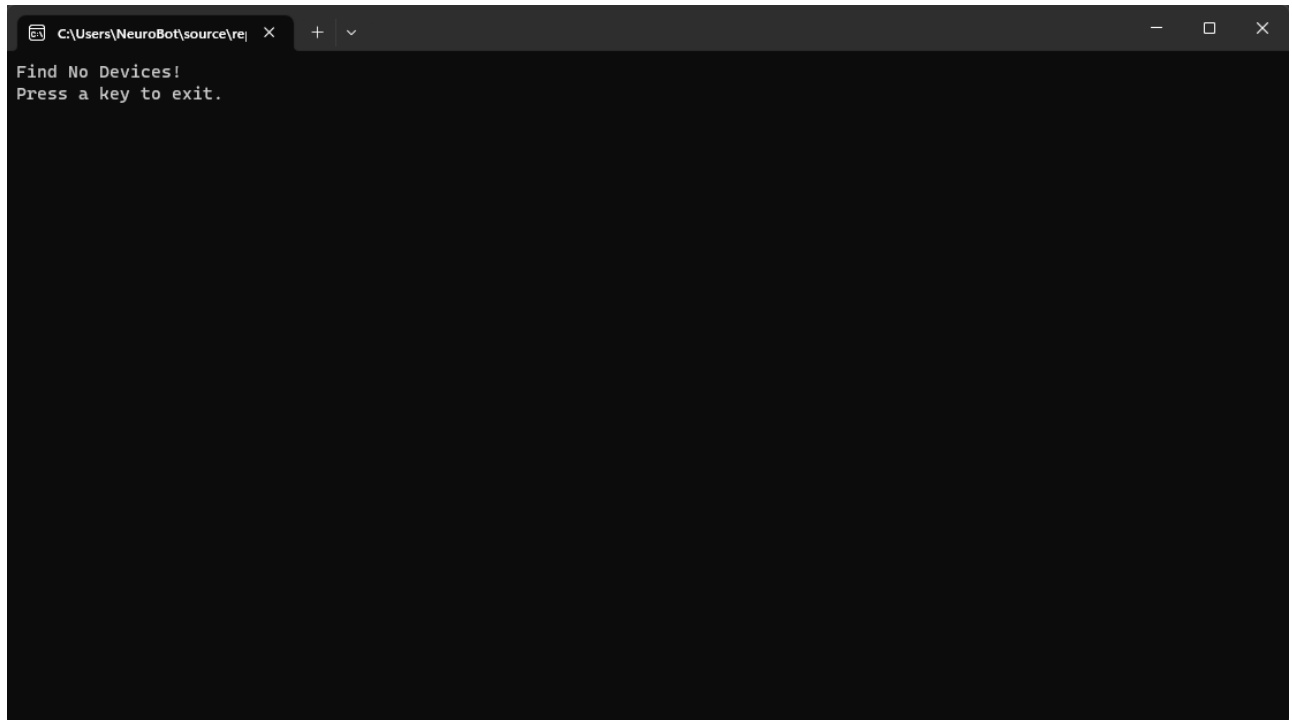
3：代码开发

- 1. 查看是否有可用的设备，成功会列举出设备，失败会返回错误码。

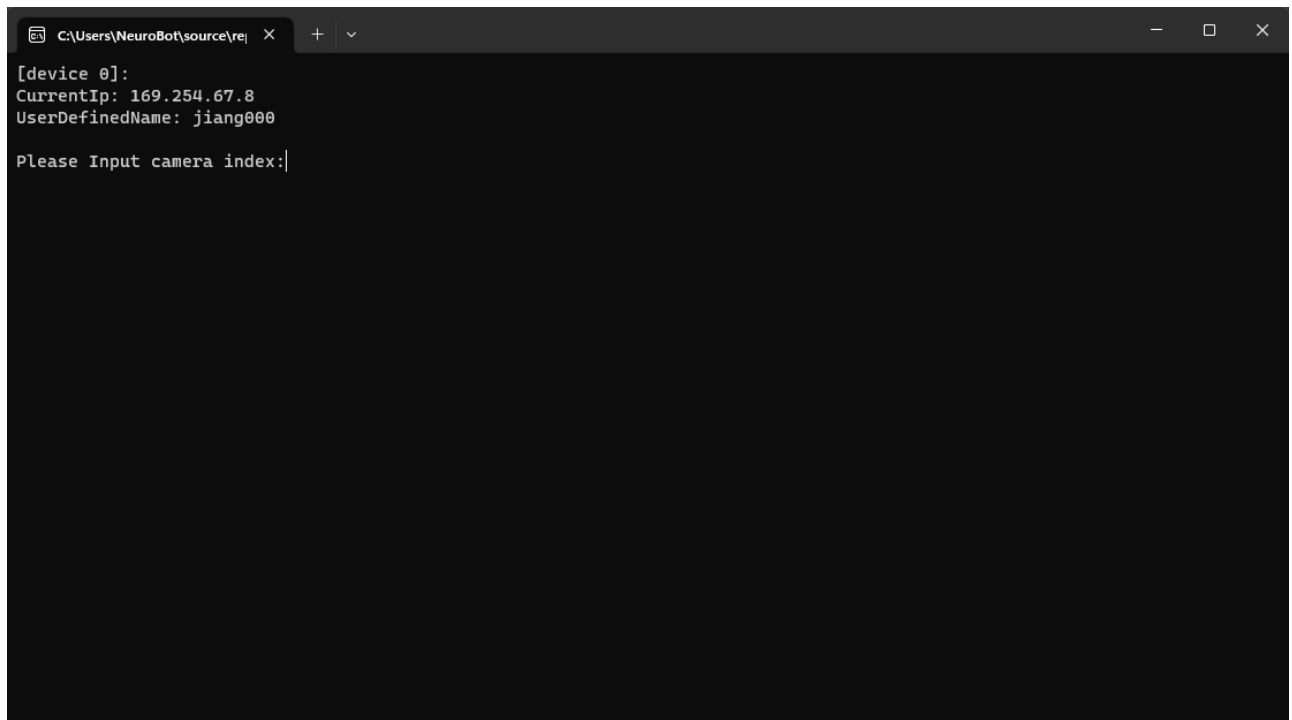
```
MV_CC_DEVICE_INFO_LIST stDeviceList;
memset(&stDeviceList, 0, sizeof(MV_CC_DEVICE_INFO_LIST));
// 搜索所有的可用设备，并返回状态码，成功返回0
nRet = MV_CC_EnumDevices(MV_GIGE_DEVICE | MV_USB_DEVICE, &stDeviceList);
// 如果搜索设备失败，返回特定的状态码。
if (MV_OK != nRet)
{
    printf("Enum Devices fail! nRet [0x%x]\n", nRet);
    break;
}
// 打印所有的可用设备的信息
if (stDeviceList.nDeviceNum > 0)
{
    for (unsigned int i = 0; i < stDeviceList.nDeviceNum; i++)
    {
        printf("[device %d]:\n", i);
        MV_CC_DEVICE_INFO* pDeviceInfo = stDeviceList.pDeviceInfo[i];
        if (NULL == pDeviceInfo)
        {
            break;
        }
        PrintDeviceInfo(pDeviceInfo);
    }
}
```

```
}  
else  
{  
    printf("Find No Devices!\n");  
    break;  
}
```

- 1.1. 失败，显示没有可用的设备



- 1.2. 成功，显示可用的设备为设备0，并且显示了当前的IP地址，以及设备名称。



- 2. 选择使用一个相机，并且打开它。

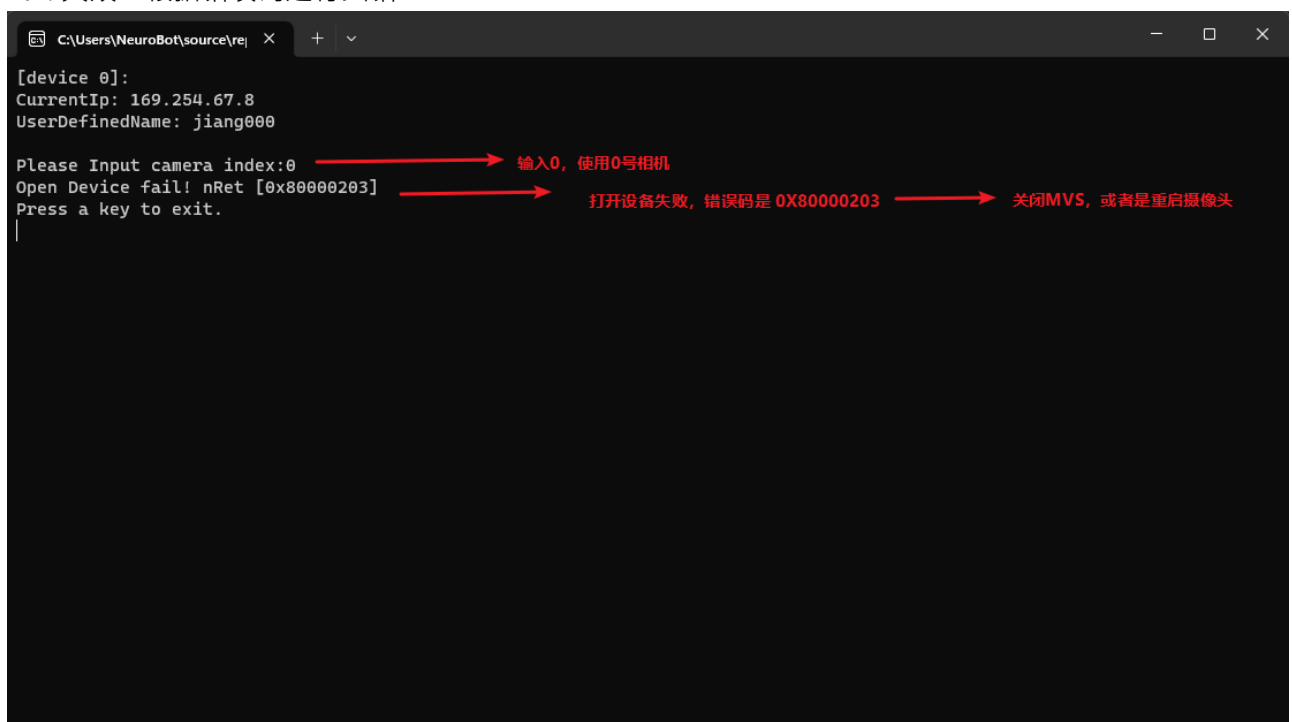
```
// 输入数字，选择一个特定的相机
printf("Please Input camera index:");
unsigned int nIndex = 0;
scanf_s("%d", &nIndex);

if (nIndex >= stDeviceList.nDeviceNum)
{
    printf("Input error!\n");
    break;
}

// Select device and create handle
nRet = MV_CC_CreateHandle(&handle, stDeviceList.pDeviceInfo[nIndex]);
if (MV_OK != nRet)
{
    printf("Create Handle fail! nRet [0x%x]\n", nRet);
    break;
}

// Open device
nRet = MV_CC_OpenDevice(handle);
if (MV_OK != nRet)
{
    printf("Open Device fail! nRet [0x%x]\n", nRet);
    break;
}
```

- 2.1. 失败，根据错误码进行纠错



- **2.2. 成功 · 获取了一帧图像**

A screenshot of a terminal window with a dark background. The window's title bar shows the path 'C:\Users\NeuroBot\source\re...' and standard window controls. The terminal displays the following text:

```
[device 0]:  
CurrentIp: 169.254.67.8  
UserDefinedName: jiang000  
  
Please Input camera index:0  
Get One Frame: Width[1280], Height[960], nFrameNum[1],address[7302e080]
```

- **3. 一秒采集一张图片 · 进行预测**

- 结果如图所示

```

C:\Users\NeuroBot\source\rej X + v
Don't need to convert!
Get One Frame: Width[1280], Height[960], nFrameNum[1],address[1a178080]
results in the 0-th image:
  bbox_count=8
predict time:                672

label:                        price1
label_index:                  4
confidential score:           0.91086
(x0, y0):                     (798.8,164.971)
(x1, y1):                     (834.624,231.732)
row_index:                    0
col_index:                    0
mask_width:                   0
mask_height:                  0

label:                        price1
label_index:                  4
confidential score:           0.839606
(x0, y0):                     (877.618,108.66)
(x1, y1):                     (936.479,181.398)
row_index:                    0
col_index:                    0
mask_width:                   0
mask_height:                  0

label:                        price1
label_index:                  4
confidential score:           0.757476
(x0, y0):                     (833.534,62.5122)
(x1, y1):                     (868.463,149.304)
row_index:                    0
col_index:                    0
mask_width:                   0
mask_height:                  0

label:                        price1
label_index:                  4
confidential score:           0.729969
(x0, y0):                     (911.407,204.143)
(x1, y1):                     (956.049,265.804)
row_index:                    0
col_index:                    0
mask_width:                   0
mask_height:                  0

```

- 修改采样的频率

```

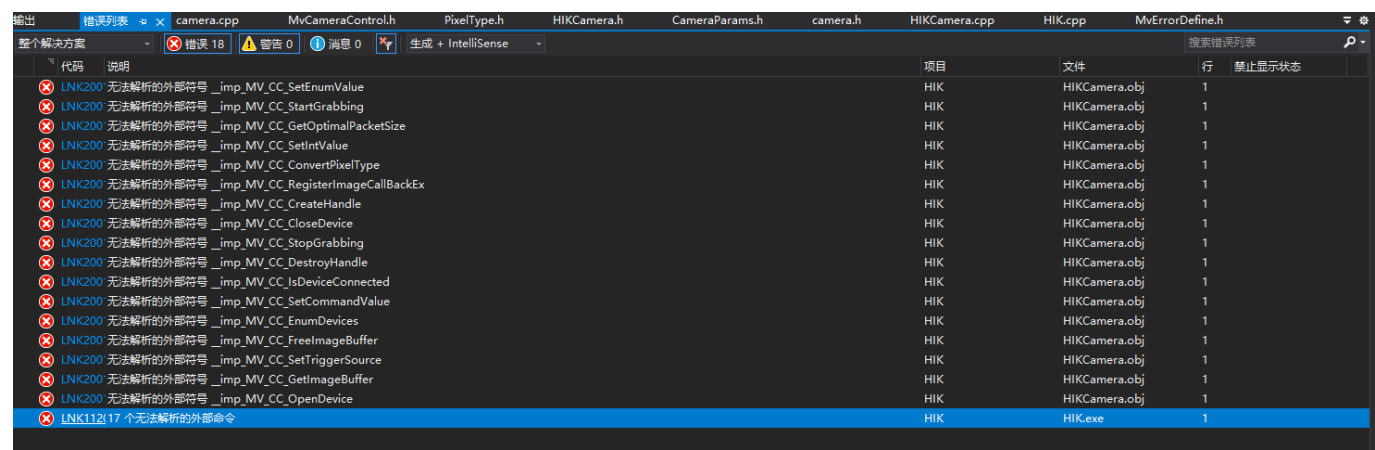
// Stop grab image
nRet = MV_CC_StopGrabbing(handle);
if (MV_OK != nRet)
{
    printf("Stop Grabbing fail! nRet [0x%x]\n", nRet);
    break;
}
// change time if you want, such as 2 seconds is 2000
// 5 seconds is 5000
// 0.5 seconds is 500

Sleep(1000);

```

4 : 可能出现的问题

- 1. 17个无法找到的外部符号



- 将 MvCameraControl.lib 添加到附加依赖项中

