Vehicle Inspection

1.Introduction

This project includes a back-to-back detector application to showcase the functionality of the Deepstream SDK. Please follow apps/sample_ The instructions in apps/deepstream app/README install the deepstream SDK, the deepstream SDK itself, and the necessary components for the application. If we use our image, we can skip this step.

2.Download Model

To download the model for the second nvifer, please visit https://github.com/NVIDIA-AI-IOT/redaction_with_deepstreamUse the following command:

```
$ cd /opt/nvidia/deepstream/deepstream/samples/models
$ sudo mkdir Secondary_FaceDetect
$ cd Secondary_FaceDetect
$ sudo wget https://github.com/NVIDIA-AI-
IOT/redaction_with_deepstream/raw/master/fd_lpd_model/fd_lpd.caffemodel
$ sudo wget https://raw.githubusercontent.com/NVIDIA-AI-
IOT/redaction_with_deepstream/master/fd_lpd_model/fd_lpd.prototxt
$ sudo wget https://raw.githubusercontent.com/NVIDIA-AI-
IOT/redaction_with_deepstream/master/fd_lpd_model/labels.txt
```

If you cannot download it here, you can download it on your computer and then transfer it to the corresponding path of the nano.Back-to-back detector application pipeline:


```
$ cd
/opt/nvidia/deepstream/deepstream/sources/apps/sample_apps/deepstream_reference_
apps-master/back-to-back-detectors
```

Run Later

```
$ Set CUDA_VER in the MakeFile as per platform.
      For Jetson, CUDA_VER=10.2
      For x86, CUDA_VER=11.8
  $ sudo make

  $ ./back-to-back-detectors <h264_elementary_stream>
    Ex.: ./back-to-back-detectors
../../../../../samples/streams/sample_720p.h264
```

The results should be as follows:

Note: Use sudo to run the above command. Secondary_ detector_ Edit the path in config.txt to the location of the model downloaded from the above site.

This document should describe the application of the sample back-to-back detector. This example is based on the deeptstream test1 example to demonstrate how to add multiple back-to-back detectors in a pipeline. The two instances of the 'nvinder' element are added to the pipeline after nvstreammux and before the display component. Both instances of 'nvifer' have their own configuration files. The first instance of 'nvifer' (person/vehicle/bicycle/road sign) will always serve as the primary detector.