Anti-Candid

# Reference

<https://github.com/AlexeyAB/darknet>

<https://alexeyab84.medium.com/scaled-yolo-v4-is-the-best-neural-network-for-object-detection-on-ms-coco-dataset-39dfa22fa982?source=friends_link&sk=c8553bfed861b1a7932f739d26f487c8>

# Environment Version

Ubuntu : 18.04

Python : 3.6.9

CUDA : 10.2

cuDNN : 8.0

Pytorch : 1.7.1

JetPack : 4.5

TensorRT : 7.1.3

# Setting Environment Variables

export PATH=/usr/local/cuda-10.2/bin${PATH:+:${PATH}}

# Pose Estimation

## DeepStream

### Getting Started

Replace the OSD binaries (x86 or Jetson) in $DEEPSTREAM\_DIR/libs with the ones provided in this repository under bin/. Please note that these are not inter-compatible across platforms.

### Path

cd /opt/nvidia/deepstream/deepstream-5.0/sources/apps/sample\_apps/deepstream\_pose\_estimation/

### Build

make

### Run

#### file (original app)

./deepstream-pose-estimation-app ../../../../samples/streams/sample\_720p.h264 /home/minggatsby/

#### camera

./deepstream-pose-estimation-app

## Classification Pose

<https://spyjetson.blogspot.com/2019/12/jetsonnano-human-pose-estimation-using.html>

<https://github.com/hafizas101/Real-time-human-pose-estimation-and-classification>

# Object Detection

## Category

Person / Cell Phone / Laptop / TV

## DataSet

<https://chtseng.wordpress.com/2019/12/13/crowdhuman-dataset-%E4%BB%8B%E7%B4%B9/>

### COCO

<https://chtseng.wordpress.com/2019/12/01/%E5%BE%9Ecoco-dataset%E5%8F%96%E5%87%BA%E7%89%B9%E5%AE%9A%E7%9A%84%E7%89%A9%E4%BB%B6%E6%A8%99%E8%A8%98/>

## DeepStream

### Classification

* + - 1. Above two person warning, over five times.
      2. Have object warning, over five times.

### Path

cd /opt/nvidia/deepstream/deepstream-5.0/sources/yolo

### Build

CUDA\_VER=10.2 make -C nvdsinfer\_custom\_impl\_Yolo

### Run

deepstream-app -c deepstream\_app\_config.txt

# Proccess

Model Convert to TensorRT => Gstreamer => Result => system(command);

# To Do List

## Inference Classification (Object)

## Command (Object & Pose)

## Add Camera Category (Object)

## Startup (shell script)

<https://www.itread01.com/p/1390851.html>

## Location Images

## DeepStream / NGC / Kubernetes / EGX

<https://developer.nvidia.com/blog/deploying-ai-apps-with-egx-on-jetson-xavier-nx-microservers/>