When running in C++

Add this to the geany **Build > Set Build Commands**

Add this to the end of **C++ Commands (Build)**

*-l:libopencv\_dnn.so*

A screenshot of a phone

AI-generated content may be incorrect.

Maybe make the images 320x320 when exporting the dataset??? That’s what is working in my code…

python -m venv name\_environment

.\name\_environment\Script\activate

#Convert from .pt to onnx format for c++

from ultralytics import YOLO

if \_\_name\_\_ == "\_\_main\_\_":

    model = YOLO("model100\_gpu\_test.pt")

    # can use tflite, onnx format doesnt seem to work...

# need to specify the imgsz I think…

    model.export(format = "tflite", imgsz = 320)

# Worked

Installed python 3.10 (python --version)

Installed cuda toolkit

Updated pip

pip install ultralytics

NEEDED VERSION 12.8 CUDA FOR THE PYTORCH INSTALLATION

pip install torch torchvision torchaudio --index-url https://download.pytorch.org/whl/cu128

*NEEDS TO BE INSIDE* ***if \_\_name\_\_ == “\_\_main\_\_”:***  *for some reason*

*Use this to test cuda version and stuff…*

import torch

import torchvision

print("PyTorch Version:", torch.\_\_version\_\_)

print("CUDA Available:", torch.cuda.is\_available())

print("CUDA Version:", torch.version.cuda)

print("torchvision Version:", torchvision.\_\_version\_\_)

*May need to do onnx conversion on the pi side:*

~~pip install --no-cache-dir "onnx" "onnxruntime" --break-system-packages~~

**~~tflite library~~**

~~pip install --no-cache-dir "tensorflow>=2.0.0" --break-system-packages~~

**DO NOT DO THIS** Install tensorflow? **DO NOT DO THIS**

Install onnx?? **Maybe not**… this may install tensorflow as well

pip install --no-cache-dir "tf\_keras" "sng4onnx>=1.0.1" "onnx\_graphsurgeon>=0.3.26" ~~"ai-edge-litert>=1.2.0"~~ "onnx>=1.12.0,<1.18.0" "onnx2tf>=1.26.3" "onnxslim>=0.1.53" "onnxruntime" "protobuf>=5" --extra-index-url https://pypi.ngc.nvidia.com

# First Try

Install anaconda

Use ***pip install ultralytics*** in the anaconda prompt

[to install pytorch for using cuda…](https://pytorch.org/get-started/locally/)

***pip install torch torchvision torchaudio --index-url*** [***https://download.pytorch.org/whl/cu118***](https://download.pytorch.org/whl/cu118)

Install [cuda toolkit from nvidia](https://developer.nvidia.com/cuda-downloads?target_os=Windows&target_arch=x86_64&target_version=11&target_type=exe_local)

[In conda prompt:](https://docs.nvidia.com/cuda/cuda-installation-guide-microsoft-windows/index.html)

conda install cuda -c nvidia

NEED TO HAVE **conda toolkit** installed and **cuDNN**

*In conda prompt:*

**conda install pytorch torchvision cudatoolkit -c pytorch**

# Second Try

In conda prompt

**conda create -p env python=3.11**

in conda prompt you can check all available environments with **conda info –envs**

Change to the environment with **conda activate C:\Users\jdesm\env**