Step(0): (optional) if want to use GPU, install CUDA and CUDNN

Step1- Create dataset folder based on Yolov8 requirements inside Yolov8\_Module

Step2- create custom.yaml file inside Yolov8\_Module and copy this this to it:

train: F:/TruckDetect/Yolov8\_Module/TruckDataset/train

val: F:/TruckDetect/Yolov8\_Module/TruckDataset/valid

#Classes

nc: 1

#classes names

#replace all class names list with your classes names

names: ['truck']

Step3- Inside Yolov8\_Module:

* Create a python Venv: python -m venv Yolov8Venv
* Active Yolov8Venv: Yolov8Venv\Scripts\activate
* Install torch.cuda based on pytorch installation Docs
* Install ultralytrics: pip install ultralytics== 8.0.42
* Install ipykernel: pip install ipykernel
* Add Yolov8Venv to jupyter kernel: python -m ipykernel install --user --name=Yolov8Venv

Step4- install vscode and jupyter extensions

Step5- open Yolov8\_Module in vscode workspace, from “Yolov8\_Module\Code” open ‘train.ipynb’, select Yolov8Venv as kernel and run all cells.