**OPERATION TO INSTALL YOLOV5 IN WINDOWS11**

attached to <https://github.com/ablanco1950/LicensePlateImage_ThresholdFiltered>

Create a directory: TestYolov5 by example

It is recommended to execute the commands from the anaconda cmd.exe

Execute the first steps indicated in https://github.com/ashok426/Vehicle-number-plate-recognition-YOLOv5

summarizing

(base) c:\TestYolov5>**git clone https://github.com/ultralytics/yolov5**

(base) c:\TestYolov5>**pip install -qr requirements.txt**

(base) c:\TestYolov5>**pip install -q roboflow**

(base) c:\TestYolov5>c**url -L "https://public.roboflow.com/ds/K9IjAYLk5y?key=9th6uXdcDR" > roboflow.zip; unzip roboflow.zip; rm roboflow.zip**

You get the file **roboflow.zip**

**HERE CHANGES WITH RESPECT TO OPERATION** https://github.com/ashok426/Vehicle-number-plate-recognition-YOLOv5

Extract all the files and folders from roboflow.zip to the same directory where the yolov5 directory is located, that is, to TestYolov5.

In the directory where the yolov5 directory is located (that is, in TestYolov5) copy the attached file **licence\_data.yaml**, this file, which contains the locations of the training images with their labels and the objects to be considered, is identical to the supplied data.yaml by roboflow, but edited in windows so it is recognized when executing subsequent commands.

In the models directory that hangs from the yolov5 directory, copy the attached file **licence\_yolov5s.yaml**, this file is identical to the yolov5s.yaml supplied by roboflow with the same considerations as those indicated in the previous paragraph.

Check that tensorflow: has been installed

**pip install tensorflow**

**RUN THE TRAINING:**

In the yolov5 directory, run:

(base) c:\TestYolov5\yolov5>**python train.py --workers 4 --img 416 --batch 32 --epochs 300 --data ../licence\_data.yaml --cfg models/licence\_yolov5s.yaml --weights '' --name yolov5s\_results --cache**

Note that the file names of **--data** and **--name** are **not enclosed in quotes**, as in the operation of https://github.com/ashok426/Vehicle-number-plate-recognition-YOLOv5

An error message may appear:

**ProgramData\Anaconda3\lib\site-packages\torch\lib\shm.dll or one of ist dependencies cannot be loaded due to Pagefile too small**. It is usually resolved by shutting down the computer and running the command alone again, without the need to increase the size of the paging file.

The –workers and –batch parameters are adjusted to minimize this effect.

Although the number of epochs is relatively small, the training process can take several hours (impossible to execute the 4500 epochs of the reference project, the quality of the results will be affected).

At the end some error messages appear: AttributeError: 'NoneType' object has no attribute '\_free\_weak\_ref', which do not seem to have any effect.

At the end, a subdirectory **runs\train\yolov5s\_resultsN** will appear in the yolov5 directory, where N is the number of executions of the train (if it is executed several times, a folder yolov5s\_resultsN corresponding to each execution will appear) with various quality statistics, and photos with the license plates assigned, as well as a folder of **weights** that are used in the Predict.

**PREDICT:**

(base) c:\TestYolov5\yolov5>**python detect.py --weights runs/train/yolov5s\_results2/weights/best.pt --img 416 --conf 0.25 --source ../test/images --save-txt**

The result is obtained in the subdirectory: **runs\detect\exp,** the images of the cars with car boxes and assigned boxes of license plates and the **labels** folder with the assigned labels.