**Vehicle Speed Detector ( Version 1.1 )**

**Installation and Work Guide**

**1. Install anaconda**

[**https://www.anaconda.com/products/individual#windows**](https://www.anaconda.com/products/individual#windows)

there is an installer at the bottom of above page for your system click and download it

**2.Install python 3x**

[**https://www.python.org/downloads/**](https://www.python.org/downloads/)

**3.Open anaconda Prompt by typing it in search bar, open it and go to work directory with “cd”command**

**type below commands in work directory**

**For CPU**

a) conda env create -f conda-cpu.yml

b) conda activate yolov4-cpu

Note : type above b) command everytime you open anaconda prompt in your work directory

**For GPU**

a) conda env create -f conda-gpu.yml

b) conda activate yolov4-gpu

Note : type above b) command everytime you open anaconda prompt in your work directory

**4. For CPU**

pip install -r requirements.txt

**For GPU**

pip install -r requirements-gpu.txt

**5. Convert darknet weights to TensorFlow model**

python save\_model.py --model yolov4

**Note**: Steps 1 to 5 should be executed initially only to create environment and install dependencies on a workstation

**6. Place video to be processed at “ \data\video” location**

**7.** **Open GUI by below command**

python OSDetect.py

**8.** **Write name of input video file near “Process Video” button (any format) and “Save As” file name with .avi extension in GUI window**

**9. Add field of view of the camera, angle of the camera and height of the camera in the input filed**

**10. Click “Process Video” button and wait for some time**

**11. Observe anaconda prompt to check for successful detection or any errors**

**12. If you want to stop processing, click “Stop” button**

**13. After completion of processing/stopping, to view output file, go to “output” folder and find desired file with .avi extension**

**14. All vehicle detection information is stored in “record.csv” file after every processing**