**Project Report On Vehicle Count Project**

* Overview

The Project is to to build a vehicle count model that takes an input of the path of the video and two coordinates (these coordinates are used to create a line you have to count the vehicles crossing this line)

* Approach Towards the Model

The Approach towards the model is to use the opencv for the object detection. The approach I took for the completion of the project is to first take input the path of the video and use createBackgroundSubtractorKNN() for the object detection of the vehicles, then i find the contours of the moving vehicle and campare it with the line which are drawn with the input of the coordinates

* Reason for the choosing of this model

The reason for the choosing of this model is that, this approach is not CPU intensive like other models like YOLO algos, RCNN, RetinaNet etc. The othe models have slighltly better results but those algos are super computing intensive. So, i Choose this model because it is not CPU intensive and it is very easy.

* Other Models

The Some other models for this approach are:

1. Yolo v4
2. EffficientDet
3. Detectron2
4. RCNN
5. MobileNet