ABSTRACT

Topic: **Vehicle detection and counting system**

Vehicle detection and counting system helps us to find the number of vehicles on the road. Here we are using videos for counting the vehicles and also identify the name and model of the vehicle. Here we are separately doing the detection of car and bus. We are using openCV andTensorflow for this detection. Detection and classification of the vehicles(car, truck, bicycle, motorcycle, bus). Recognition of approximate vehicle color. Detection of vehicle direction of travel. Prediction the speed of the vehicle. Prediction of approximate vehicle size.

A vehicle detection and counting system could be beneficial for the traffic police because everything they can monitor from one place only likes how many vehicles have crossed this toll and which vehicle. As this application can be planted anywhere as it only requires a camera or some wires for establishing the connectivity with the central system hence if the traffic is high at some iplace, then from that area, an officer can monitor it and forward the information to next toll officer so that they could be prepared beforehand.