

Smart Traffic Analysis and Forcasting System

This project aims to give solutions for road traffic and give static data to government authorities. Mainly this project gives facilities for two groups of users.

1. All public drivers
2. Government authorities

Drivers

In this project we introduce mobile apps that can be installed on their mobile phones and from that they can get knowledge about each road entrance and how it behaves such as current traffic state, incoming vehicle count, outgoing vehicle count. Not only Current state. They can see forecasting traffic states each time up to next 7 days with 5 minute time intervals. From these facilities users can decide their own path to destination with no traffic experience. Not only traffic data users can get knowledge about Air quality of each location and forecasting also. These data collected from camera system which were established on each location and counted vehicles using computer vision.

Government Authorities

Instead of special cases, the government does not have accurate real time data about the number of vehicles entering and leaving to the city from each exchange point. When police need to find a suspect vehicle then they need to check all CCTV cameras and check one by one. It is a huge time consuming work and sometimes it is impossible to find a vehicle because of the complexity of that work. Normal methods for speed check in vehicles are assigning two or more police officers to each location and using speed meters to measure speed. Due to speed sometimes officers can not recognize their number plates also.

In this project we provide reliable and efficient solutions for above mentioned problems. We introduce a website for monitoring all above data and more. Using camera systems in each location our system can identify which vehicle is crossing the checkpoint and it can recognize license plate number, moving speed date and time and the system will

automatically save that data. From these data authorities can find any vehicle which crosses the points by using only the license plate or time which it crosses. Using speed data authorities can list illegal activities easily without wasting money. Authorities can get static data about locations such as average speed of each point, forecasting demands for roads.