Literature Survey

Group No: 12

Group Name: Trouble makers

Research Topic: **Traffic Management System**

01. Density Based Traffic Signal System

Summary:
We conclude the Density measurement by using opencv tool as software for image processing by just displaying the various conversion of image in the screen and finally surrounding the box on the vehicle in the given image, the number of vehicles is calculated. We can calculate the density of the vehicle by using mat lab tool by comparing the four side of the image which is given as a input. we can simulate the result of the four given input images but this cannot be used in real time applications as it is very slow and the software is not free of cost like opencv to overcome this disadvantage of mat lab, opencv software is used which is very easy to install and is open-source software and can be used in real time application in a quick manner. In this paper we have shown the density measurement in the signal by using opencv in the System.

REFERENCES:

https://www.google.com/search?client=avast-a-1&q=IJIRSET+density+based+traffic+control+system&oq=IJIRSET+density+based+traffic+control+system&aqs=avast.0.69i59j69i59i450l8.12j0j7&ie=UTF-8

02. DENSITY BASED TRAFFIC CONTROL SYSTEM

Summary:
Density based traffic control system aims to save the number of manhours wasted at the signals and hence making effective utilization of time. Further a lot of work and progress can be made on these lines by giving priority to emergency tag vehicles. Also, a lot of work can be done on the usage of solar energy of the operation of such systems which can also make them highly energy efficient. It is also possible to make use of gas sensors to control the timing of the timers in the traffic nodes. Using GPRS map as an additional step for progress in this area, the best route can be figured out for emergency as well as police vehicles.

REFERENCES:
https://www.researchgate.net/publication/342466360_DENSITY_BASED_TRAFFIC_CONTROL_SYSTEM

03. DENSITY BASED TRAFFIC CONTROL SYSTEM

Summary:
Detecting the object using the IR sensors with theoretical explanation is provided in bibliography content. The bibliography content is the most significant contribution of research since it will lead to a new area of research. We have identified and discussed the limitation/future scope of various methods. Also, we have noted some features and information about other sensors and microcontroller but have high cost and computational complexity. Specifically, the IR sensors are used for object detection and

Arduino mega microcontroller is used for allotment of signal The sensors were able to detect the vehicles and microcontroller also able to manage the signal timing and based on detected vehicle count signal allotment is also done. This research can be further developed and used for traffic management in urban cities and high traffic density places.

REFERENCES:
https://www.irjet.net/archives/V7/i2/IRJET-V7I2331.pdf

04. Design and Implementation of Density-Based Traffic Management System

Summary:

The implementation of a smart traffic light system with a speed detection system will, to a very large extent, reduce road accidents caused by over-speeding vehicles and also lessen traffic congestion in our society. Though the work has achieved its main objectives of smart traffic control and high-speed detection, there is the need for more research and improvements. The following recommendations are hereby suggested: • A system where WIFI technology should be used as it has a wider range and more functionalities than Bluetooth technology; • The system should be powered by a solar system to promote green energy operations and reduce consumption of electricity from the grid; and • A surveillance system should be installed to capture the vehicles going beyond the stated speed limit.

REFERENCES:
https://www.ripublication.com/irph/ijert20/ijertv13n9_08.pdf