**SMATRACON**

**ABSTRACT:**

According to the recent survey the number of vehicles is more in cities when compared to the villages. Recent survey revealed that vehicles with steep increase of 1.84% every year is happening around the world. To control and monitor the traffic machine power is to be implemented in such a way that the problem can be solved easily within less amount of time. Many machine controllers have been implemented but failed due to the limitations in it. The present traffic light controllers have limitations because it uses the predefined hardware that does not have the flexibility of modification on real time basis. To moderate, control and monitor the traffic in efficient and modern way we exploit the new and easy technique called as “SMATRACON – SMART TRAFFIC CONTROL” using Internet of Things (IoT). It uses the sensors along with the embedded technology. The time span of the red, orange and green lights will be smartly decided based on the heavy traffic on adjacent roads. When compared to fixed mode traffic light controller this new methodology is more efficient as well as flexible. The main theme is to track the vehicle like ambulance’s location and measure the range in which it is located using server and operate in smart and intelligent way to pass the emergency vehicles ambulance. We can store the data in the server for further purposes.

**INTRODUCTION:**

Now-a-days traffic management has become one of the severe problem due to the growth of industrialization and population. Due to the tremendous growth in the traffic, control of traffic by humans became difficult and so machine powered traffic controllers were developed and came into existence using the modern technologies as a result control over the traffic became somewhat reduced. Due to the heavy population in the cities as well as villages traffic problems like heavy traffic jams, violation of traffic rules, improper traffic management and traffic congestion increased enormously that results in long waiting times, loss of life, wastage of fuel and money, accidents etc., To solve the problem, a fast, economical and efficient traffic control system for national development and public sustenance is needed. Among all the best ways of improving traffic flow and safety of the current transportation system, practical application of automation and intelligent control methods to roadside infrastructure as well as vehicles is best and quick method.

The main problems are:

1. Heavy Traffic Jam.
2. Emergency vehicles struck in traffic jam.
3. Improper management of traffic signals.

Basic Functionalities include:

1. Developing the server to handle previous data in automatic way.
2. Developing a Free Open Source Software (FOSS) mobile application not only to track the location as well as position but also to calculate the distance of vehicle from the traffic control booth (system).
3. Developing a monitoring control system so that monitoring within few moments with respect to the situation of traffic.

**LITERATURE SURVEY:**

**DIAGRAM:**

**SOLUTION:**

**CONCLUSION:**

**REFERENCES:**