

# Traffic control system for vehicle with a medical emergency

#1 Ajinkya Magar, #2 Harshavaradhan Magar, #3 Akshay Lokare, #4 Pratik Kajale  
#5 Prof.S.T.Sawant Patil



<sup>1</sup>ajinkyamagar93@gmail.com  
<sup>2</sup>harshmagar123@gmail.com  
<sup>3</sup>akshaylokare.11@gmail.com  
<sup>4</sup>pckajale@gmail.com

#12345 Department Of Electronics And Telecommunication  
Sinhgad Academy of Engineering, Pune

## ABSTRACT

Now a day's growth of industries and social process has led to an immense increase in the population invariably, it leads in an increase in number of vehicles on road, which create so much problems Traffic congestion and traffic jams are the major problems for ambulance fire brigade which need path in the traffic to save human life To solve this problem we use this system for emergency. This system control the traffic by turning the red lights off and green light are on that path of the Emergency vehicle with the help of the controller . The system consists of an android application which registers the vehicle. in the case of emergency vehicle send the request to hospital in response of request from vehicle hospital sends acknowledgement to vehicle.

## ARTICLE INFO

### Article History

Received: 29<sup>th</sup> May 2019

Received in revised form :  
29<sup>th</sup> May 2019

Accepted: 31<sup>st</sup> May 2019

Published online :

1<sup>st</sup> June 2019

## I. INTRODUCTION

The growth of industrialization and urbanization has led to an immense increase in the population invariably leading to rise in the number of vehicles on road. The resulting traffic congestion and traffic jams are the major hurdles for emergency vehicles such as ambulance or any medical vehicles carrying critical patients as these emergency vehicles are not able to reach their destination in time, resulting into a loss of human life.

To solve this problem to some extent we have apparently come up with "Intelligent Traffic Control System (ITCS) for ambulance or any medicals vehicles ". The proposed system clears the traffic congestion by turning all the red lights to green on the path of the ambulance, hence helping in clearing the traffic and providing way towards its destination.

## OBJECTIVE:

To design and implementation of this technique is directly targeted for traffic management so that emergency vehicle on road gets clear way to reach their destination in less time and without any human interruption.

## II. FIGURE AND TABLE

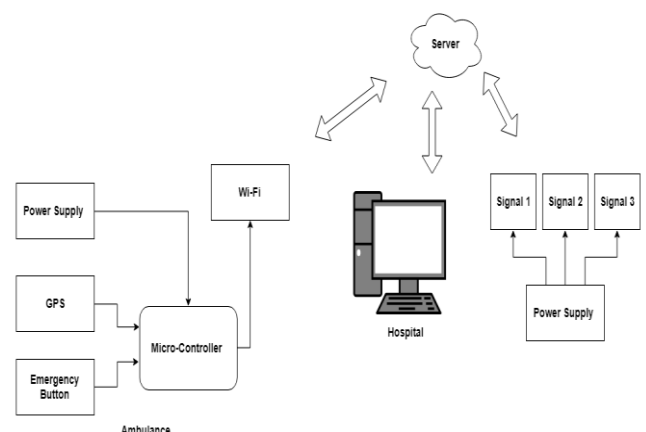


Fig 1 Block diagram

### III. PROPOSED METHOD

Our Project is based on the location provided by the GPS Module i.e The Latitude and Longitude of the position to be located. The ESP and the GPS module are connected to the system. The GPS send the Latitude and Longitude as the output to the ESP which displays it on the arduino software in the system. A C Programming code carries out the above functions.

In the Final Stage we get the text file of the Latitudes and the Longitudes from arduino software using CoolTerm. The text file is connected to the software and a code is written to get the location of the particular Latitude and Longitude by linking it with google maps. The exact location is then displayed in the google maps

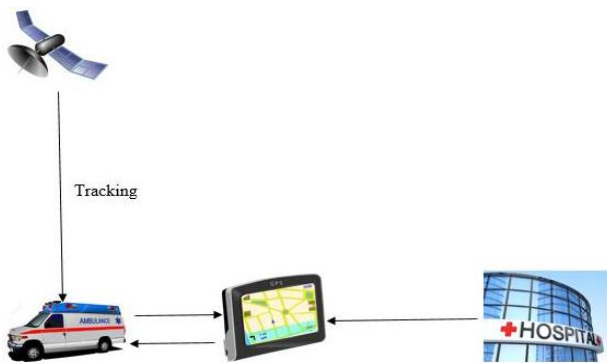


Fig 2. System Architecture

The hospital management can track down the Ambulance nearest to the Patient's Location and redirect it to the patient instead of sending the Ambulance present at the Hospital, this will help the patient to reach the hospital as soon as possible specially in critical condition

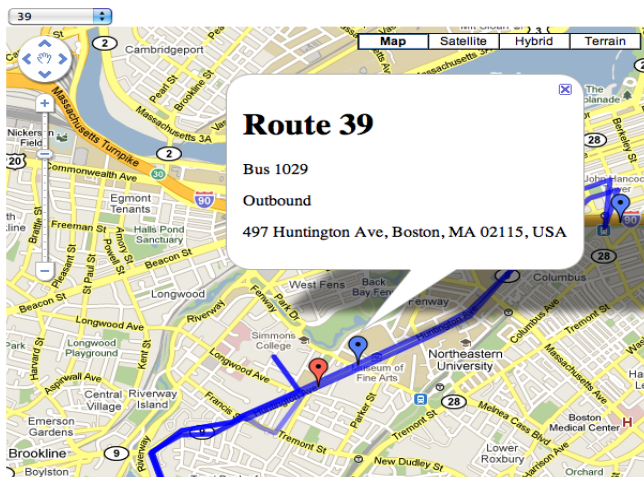


Fig 3. Navigational Path

### IV. CONCLUSION

These system is used by the hospitals to locate their ambulance. The aim of the project is to minimize the deaths of critical patients by making sure that they reach hospital in minimum time for medication. GPS technique is used so that the hospital can take immediate action which might reduces the grimness. In this system accurate and the main advantage is that it minimize a lot of time.

Ambulance can use ESP microcontroller to send the message to the regarding the location of patient by using panic speech.

### V. ACKNOWLEDGEMENT

It gives me an immense pleasure to submit this report on "Traffic Control System For Vehicle with Medical Emergency", I have tried my level best to represent this topic into compact and to the point framework. I truly express my deepest thanks to all the people who have given their precious time and encouragement and my guide PR.S.T.Sawant Patil for his patience he showed me during the process of preparation of the report from the initial conception to final presentation and all staff of EnTC dept. I would like to thanks from the core of my heart to our H.O.D of EnTC department Dr.K.M Gaikwad for being constant pillar of support, during the preparatory stages.

### REFERENCES

- [1] Intelligent Ambulance with Traffic Control (Gargi Beri, Pankaj Ganjare, Amruta Gate, Ashwin Channawar, Vijay Gaikwad)
- [2] An Intelligent Ambulance with some Advance features of Telecommunication (Pratyush Parida, Sudeep Kumar Dhurua, P. Santhi Priya)
- [3] Automated Emergency System in Ambulance to Control Traffic Signals using IoT (Dr. A. Balamurugan, G. Navin Siva Kumar, S. Raj Thilak, P. Selvakumar)
- [4] Smart Traffic Control System Using Image Processing (Prashant Jadhav, Pratiksha Kelkar, Kunal Patil, Snehal Thorat):

[5] Ambulance Controlled Traffic System Using RFID Technology with LabVIEW Simulation (S. Chandrakanth Sagar, Dr. M. Narayana)

[6] Intelligent Ambulance Rescue System (Nangare Yogini K. and Prof. Hate S.G)