

PYTHAKON-22

College:ICT-Ganpat University

Mentor:Prashant Jani

Problem Statement Title: Smart Traffic System.

Team Name: Binary Brains

Team Member: Manthan Suthar-CS-21162172011

Devarsh Mistry-BDA-2116212202

Information About The Pythakon

- The Smart Traffic System Is Based on The IOT(Internet of Things) So In Our Team Has Been selected For Event And Then There Are Three Round In Round One We Explain Our Project In Brief In First Round It's Just Like Definition And Understanding To Inspection
- In Second Round We Have To Show Work About Project What We done Implementation On Project So Here We Work On Module First We Create The Signal And RFID Code All Of The Connection What We Done
- One More Thing That In All Round The Inspection Person Is Different
- In Third Round We Had Done Our Project What We Want To Create The Thing Is That We Create The Module For Project Module Work Like When The Cross Road The Ambulance Is Going But in Lan 1 The signal Had Close And Ambulance What To Go So Using RFID Scan The Card And Lan 1 Is Opened And All Other Lan Has Been Closed For 30 Second The



Video Link Is Also In Docx File For Better Understanding So We Show Them One Demo And Also Explain

- After That We Had Selected For Final Round There Are 8 Team Selected Out Of 65 In Final Round We Explain Our Project To All Four Inspection We Also Tell About What Was The Future Work And Then **Team Has Win At Second Position**

Certification

Team Certification



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DEVARSH MISTRY



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for participating in the National Level Hackathon "Pythakon - 2k22" organized during 5 - 6 August at CHARUSAT campus, Changa, Anand, Gujarat.

PROF. MOHAMMED BOHARA
CO - ORDINATOR

PROF. SACHIN PATEL
CO - ORDINATOR



DR. Y. P. KOSTA
CONVENOR

DR. VIJAY CHAUDHARY
DEAN, FTE, CHARUSAT

www.charusat.ac.in
<https://clubgamma.github.io/pythakon/>



VideoLink: https://drive.google.com/file/d/1-OvfdedNoWDTFvrck_bRYgrQLZCIQ8mZ/view?usp=sharing

Smart Traffic System

Abstract

- Now a day many people are died in accident because main reason some time's delay occur before the person reaches the hospital in ambulance. The emergency condition, each and every seconds are very

important to saving a patient's life. The major concept of this project is use to every seconds are efficiently to save a person. The traffic congestion is a main problem that cause delay to ambulance. This leads to waste of time and also sometime causes dead. To overcome this situation, we have proposed an IoT based traffic light signal control for Emergency vehicle. We will use sensor in camera for emergency vehicle, In this sensor are attached with emergency light in ambulance and fire-engines. When the emergency lights are on, the sensor will on, and after if this vehicle are nearby traffic signals in 100m traffic signals automatic predict, and signals will go green for the Emergency vehicle as it comes in the vicinity of the traffic signal, thus providing them with a clear path to reach its destination. The original signal is restored as soon as the ambulance goes undetected by the sensor of the traffic signal. This will be 24*7.

Project Summary

- The project traffic management system for emergency vehicles is a project that has the main goal to provide faster and easier way to the emergency vehicles
- The traffic management system for an emergency is a project that desiresto make an I.O.T- based traffic light signal control for the Emergency vehicles. In this project, a sensor in-camera for an emergency vehicle is used. This sensor is attached externally to emergency vehicles.
- In this project GPS map, the touch display system is also used for all emergency vehicles. In this display, the driver of the emergency vehicle finds the route easily and shows all the traffic signals through google map and this display will also give them access to the emergency vehicle to transmit the message to nearby traffic signals.
- One of the aims of this project is to save the lives of patients by not delaying emergency vehicles. So one of the main mottoes

of this project is to prevent waste of time for all emergency vehicles by all possible ideas.

Problem & Solution

Problems

In the existing system, the emergency vehicle can't reach at the proper time. As in an emergency, each second are important to saving a person's life.

Solutions

So, the future scope of this project (Smart Traffic System) could be made completely beneficial as we will make smart emergency vehicle.

Conclusion

This project represents an example of an intelligent ambulance traffic control with lot. If it is fixed the ambulance will not wait for a signal in traffic. And also it is the way to easier to reach the hospital for quickly and save the patient's life. By this project the life is saved. In future, this project will be enhanced by using automated approach for fast and accurate performance.

Block Diagram of Traffic signal control unit

