TRAFFIC MANAGEMENT FOR SAFE PEDESTRIAN WALK USING SMART TECHNOLOGY

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ABSTRACT

The traffic management considered as one of the major dimensions of a smart city. This paper is based on Smart Technology is used to predict the traffic density for future to minimize the accident or violation rule it avoid the accident while crossing the road in pedestrian walk. This paper gives a solution and it's proportional. This system automatically detects without manual errors. If the violation exists, our system will automatically find the vehicle by sending fine fee message to the concern person and display the vehicle number in a LED display board on particular traffic signal. This paper mainly helps to avoid the unnecessary worst traffic disasters.

Keywords:IOT, Sensors,

INTRODUCTION

Internet of things (IOT) refers to a system which are interconnected among them and also it collects the data and transfer the data through wireless connection without a human invention. IOT device provides a data and insights needed to complete device deployment streamline workflows, visualize application models need process compliance requirements and change more efficiently in the business environment. our planet has more connected devices than people. new technologies and connection strategies also hit the market.

The invention of IOT will continue to transform unattached objects into smart connected devices. This trend will impact our personal lives. The Internet of Things is the devices that can be further processed to generate meaningful analytical results while sending and receiving data or information that are always anywhere and at any time.

Using of Internet of Things, we can save time and save people life by giving solution for the pedestrian crossing accident by sensing the vehicle number using RFID reader We can easily identify who has violated and also, we can send a fine message to the concerned person by using GSM modem. When the signal is red the pedestrian walk will be active and the RFID reader starts to sense the vehicle which are violated when the signal is green pedestrian walk will be inactive. so, no work will be done manually, everything happens at the spot through IOT System.

LITERATURE REVIEW

This section provides a brief knowledge about the proposed system in urban city. Increased number of commercial vehicles as well as personal vehicles and limited road infrastructure has risen the traffic problems. In developing and developed countries dealing with traffic related issues on daily basis, has become very common. This ever-increasing traffic related concerns has triggered worldwide scientists, engineers and researchers to discover innovative techniques and solutions for effective and efficient traffic management specifically for today's Smart Cities. In this section, some related work is analysed and reviewed for better understanding of existing solutions and technologies used in developing Smart Traffic Management Systems.

B. John F. Gilmore and Khalid J. E library, "AI In Advanced Traffic Management System" A typical Traffic Management System controls the operation of Signal Indicators according to decided logic. However, in this paper authors have discussed the use of Artificial Intelligence in Traffic Management System covering the operations of the overall transportation system of surface streets, interstate highways, public transportation Intelligence based Knowledge sources in the system addresses problems in traffic con, traffic control and monitoring gestion, incident management., and emergency vehicle response etc. Authors have claimed that Artificial

B. C. Robert L. Bertini and Ahmed El-Geneidy, "Advanced Traffic Management System Data "In this chapter, authors have presented a holistic view about

Intelligent Traffic Management System and successfully clarified that the intelligent traffic management system in a whole consist of various subsystem components such as Incident management, Transit Management, Electronic Payment, Traveller Information, road infrastructure operations and maintenance,freeway management, emergency management, crash prevention and safety and road weather management.

Jiandong Cao, "Research on Urban Intelligent Traffic Monitoring System Based on Video Image Processing" In this paper, Author has proposed Video and Image processing technology for intelligent traffic monitoring system. The paper has described in detail the functional design of Smart Traffic Monitoring System with video image processing and database analysis. In this paper author has claimed that proposed video and image processing solution can provide intelligent analysis to the traditional traffic control system with the association of relevant data analytics.

COMPARITIVE ANALYSIS

S.NO	TITLE OF THEPAPER	AUTHOR	HARDWARE
1	IOT Based Traffic Management System.	Shashank S, Kiran P, Nischay D	Camera, Raspberry Pi, Microcontroller, Node MCU.
2	Development of an IOT Based Real Time Traffic Monitoring System for City Governance.	Mohammed Sarrab,Medhat Awadalla	Magnetic Sensors,Node MCU, Thinger.Io,LCD Unit.
3	Traffic ManagementSystem Using IOT.	Sanjay Kumar Sahv,Atul Basant, Taman Vasudev.	Wi-Fi Module,RFRX Module.
4	IOT Based Intelligent Ambulance Monitoringand Traffic Control System.	Jijin Godwin, B.V Santhosh Krishna.	Heart Rate Sensor,IR Sensor, Zigbee Module.

CONCLUSION AND FUTURE WORK

In this paper, we have proposed IOT based Traffic management system for safe pedestrian walk. In this system firstly the RFID reader starts to detect the vehicle number when the traffic violation takes place. The person will be fined through a message and his vehicle number will be displayed in the LCD display. It is highly reliable system to ensure the safety of our life. The future scope for the traffic light management is dynamic. Next stage may be implemented for controlling the speed of the vehicles.so we can minimize the road accidents.

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