SMART TRAFFIC LIGHTS USING CCTV

A PROJECT REPORT

Submitted by,

T LOHITH	- 20201CEI0076
A SATHVIK GOUD	-20201CEI0003
M RAGHAVENDRA KUMAR	-20201CEI0012

Under the guidance of,

Mr. MOHAMED SHAKIR

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER ENGINEERING
[ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING]

At

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

PRESIDENCY UNIVERSITY

BENGALURU

JANUARY 2024

PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report **"SMART TRAFFIC LIGHT USING CCTV"** being submitted by T LOHITH, A SATHVIK GOUD, M RAGHAVENDRA KUMAR bearing roll numbers 20201CEI0076, 20201CEI0003, 20201CEI0012 in partial fulfilment of requirement for the award of degree of Bachelor of Technology in Computer Engineering[Artificial Intelligence and Machine Learning] is a bonafide work carried out under my supervision.

12.1.2024

Mr. MOHAMED SHAKIR
Assistant Professor
School of CSE
Presidency University

12-1-24

Dr. GOPAL K. SHYAM
Prof. & HOD
School of CSE
PresidencyUniversity

Dr. C. KALAIARASAN
Associate Dean
School ofCSE&IS
Presidency University

12/1/24

Dr. SHAKKEERA L
Associate Dean.
School of CSE&IS
Presidency University

Dr. Md. SAMEERUDDIN KHAN
Dean
School of CSE&IS
Presidency University

PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

DECLARATION

We hereby declare that the work, which is being presented in the project report entitled **SMART TRAFFIC LIGHT USING CCTV** in partial fulfilment for the award of Degree of **Bachelor of Technology in Computer Science and Engineering**, is a record of our own investigations carried under the guidance of **Mr. Mohamed Shakir, Assistant Professor, School of Computer Science and Engineering, Presidency University, Bengaluru.**

We have not submitted the matter presented in this report anywhere for the award of any other degree.

Name Of Student	Roll Number	Student Signature
T LOHITH	20201CEI0076	T. Lohith
A SATHVIK GOUD	20201CEI0003	Goud
M RAGHAVENDRA KUMAR	20201CEI0012	Raghavendra

ABSTRACT

In this project the planned to use solar panels to give supply to traffic system and also focuses on the algorithm for switching the traffic lights according to vehicle density on road, thereby aiming at reducing the traffic congestion on roads which will help lower the number of accidents by using artificial intelligence. In recent years, video monitoring and surveillance systems have been widely used in traffic management for travel information, ramp metering and updates in real time.

In the present scenario vehicular travel is increasing all over the world, especially in large urban areas. Therefore for simulating and optimizing traffic control to better accommodate this increasing demand is arises. In this paper we studied the optimization of traffic light controller in a city using wireless sensor. We have proposed a traffic light controller and simulator that allow us to study different situation of traffic density in City. Using wireless sensor we can easily senses the density of traffic because the general architecture of wireless sensor network is an infrastructure less communication network.