BLIND CROSS POINT ACCIDENT AVOIDANCE SYSTEM BY USING RASPBERRY PI AND ULTRASONIC SENSORS

A Project report submitted in partial fulfillment of

the requirements for the award of degree of

BACHELOR OF TECHNOLOGY
IN
ELECTRONICS AND COMMUNICATION ENGINEERING

Submitted by

M.VENKATA SIREESHA
Regd.No.16811A0435

K.ARJUNAMMA
Regd.No.16811A0426

D.LAXMI SIVA SAHITHI
Regd.No.16811A0417

B.TARUN KUMAR
Regd.No .16811A0403

Under the guidance of
Mr. S.VENKATA RAMANA M.Tech,
ASSITANT PROFESSOR, AIET.

DEPARTMENT
OF
ELECTRONICS AND COMMUNICATION ENGINEERING
AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY
(Accredited by NAAC, Approved by A.I.C.T.E, Affiliated to J.N.T.U. KAKINADA)
TAMARAM(P.O), MAKAVARAPALEM(M.O), NARSIPATNAM(R.D)
VISAKHAPATNAM DISTRICT-531113
2016-2020

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DEPARTMENT OF

ELECTRONICS AND COMMUNICATION ENGINEERING

BONAFIDE CERTIFICATE

This is to certify that the project entitled "BLIND CROSS POINT ACCIDENT AVOIDANCE SYSTEM BY USING RASPBERRY PI AND ULTRASONIC SENSORS" in partial fulfillment for the degree of Bachelor of Technology in ELECTRONICS AND COMMUNICATION ENGINEERING at AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, MAKAVARAPALEM, VISAKHAPATNAM is an bona fide work carried out by M.VENKATA SIREESHA (16811A0435), K.ARJUNAMMA (16811A0426), D.LAXMI SIVA SAHITHI (16811A0417), B.TARUN KUMAR (16811A0403) under the guidance and supervision during 2016-2020.

PROJECT GUIDE

Mr.S.VENKATA RAMANA, M.Tech

Assistant Professor

HEAD OF THE DEPARTMENT

Mr. E.GOVINDA, M.Tech., (Ph.D)

Associate Professor
HEAD OF THE DEPARTMENT
DEPARTMENT OF ECE
Avanthi Institute of Engg.&Tech.
Makavarapalem, Visakhapatnam Dist-531 113

EXTERNAL EXAMINER

ABSTRACT

In this project we propose a system which can be installed on the cross points inside any colony or outskirts area. We ourselves noticed that on highways we have red lights and security ,traffic police, etc., but we don't have any such kind of amenities on street colonies and their also cross points do exist, and most of them are blind due to the construction of houses and residential building adjacent to the cross point roads. Hence we propose a system to install there with 4 object distance measurement sensors, which can detect the distance of any vehicle, object, animal, etc., from the cross point, and if the distance is lesser than the threshold value then the system will flash a red or yellow light to drive slowly for other axis road and for vice versa. In case no one is there in the range then it is going to be green for all 2 axes.

HARDWARE REQUIREMENTS

- RASPBERRY PI

- ULTRASONIC SENSOR

- LDR

- LED'S