A

Project Report

On

IOT BASED TRAFFIC MANAGEMENT SYSTEM

Submitted to

Department of

ELECTRONICS & COMMUNICATION ENGINEERING

By

MATTA RAGINI PARIPELLI NAVYA G <mark>UMMADAVELLI DEEKSHITHA</mark> BOPPA AKHILA	206Y1A0436
	206Y1A0441 <mark>206Y1A0422</mark>

Under the Esteemed Supervision of

Mr.K.Ravikiran Assistant Professor



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING SUMATHI REDDY INSTITUTE OF TECHNOLOGY FOR WOMEN

(Approved by AICTE, New Delhi, Affiliated to JNTUH, Accredited by NBA)

Ananthasagar (Vill), Hasanparthy (M), Warangal.



2022-23

PRINCIPAL

Sumathi Reddy Institute of Technology for I Ananthasagar (V), Hasanparthy (W) WARANGAL - 506 371 (T.S.)



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE

This is to certify that the project entitled "IOT BASED TRAFFIC MANAGEMENT SYSTEM" carried out by the following students of III Year B.Tech in Electronics and Communication Engineering during the academic year 2022-23.

MATTA RAGINI

PARIPELLI NAVYA

GUMMADAVELLI DEEKSHITHA

BOPPA AKHILA

206Y1A0441 206Y1A0422 206Y1A0412

206Y1A0436

Mr.K.Ravikiran

Supervisor



Dr. K.Mahender Head of Department

PRINCIPAL Gumathi Reddy Institute of Technology for Woman Ananthasagar (V), Hasanpar's (M) WARANGAL - 506 371 (T.S.)

ABSTRACT

The purpose of this project is to propose a smart traffic management system using the Internet of Things and a decentralized approach to optimize traffic on the roads and intelligent algorithms to manage all traffic situations more accurately. The system takes traffic density as input from cameras, which is extracted from a Digital Image Processing technique and sensors data, resulting in output as signals management. An algorithm is used to predict traffic density to minimize traffic congestion.

Sensors are used to measure the traffic density. After analyzing the sensor data, System controller sets traffic signal time by traffic management algorithm and system controller sets traffic signal time by traffic management algorithm and also sends data to a cloud server through a Wi-Fi module.

A RF based communication System is used for getting information from the emergency vehicles.



Rija

Principal Sumathi Reddy Institute of Technology for Women Ananthasagar (V), Hasanparthy (M) WARANGAL - 506 371 (TS)