

A Major Project Report On  
**IOT STREET LIGHT SYSTEM WITH MOTION DETECTION &  
POWER SAVING**

Submitted to  
**Jawaharlal Nehru Technological University, Hyderabad**  
In partial fulfillment of the requirement for  
The award of degree of  
**BACHELOR OF TECHNOLOGY**  
In  
**ELECTRONICS & COMMUNICATION ENGINEERING**

by  
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**CERTIFICATE**

This is to Certify that the major project report entitled “IOT STREET LIGHT SYSTEM WITH MOTION DETECTION & POWER SYSTEM” submitted to JNTUH is carried out by the following students of IV B.Tech in the partial fulfillment of requirement for the award of degree of Bachelor of Technology in Electronics & Communication Engineering during academic year 2022-2023.

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## ABSTRACT

Green technology for economically viable engineering designs and sustainable environment is highly desirable for future smart city applications. An intelligent system for operating and controlling lighting in order to save energy is developed and presented in this article. The system is implemented on Alibaba Cloud IoT platform on STM32 development board using STM32 medium-density performing micro controller with high performance ARM® Cortex®-M3 RISC core. It includes communication between wireless sensors and actuators, and control of light sources. The HC-SR501 human infrared sensor is also used for detecting people and BH170 photosensitive sensor for synthetic brightness detection.



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