IOT based Smart Street Light System

Abstract:

The aim of IoT Based Smart Street Light System is to decrease power consumption and manpower. This is done by using the LDR sensor. Here the LDR sensor is used ON-OFF the street light based on the ambient intensity level. It is an uncomplicated light/dark activated switch and contains a relay at its output. This switching can be done by a low-cost Wi-Fi module ESP8266 after reading the LDR value. The real working status can be accessed via internet. It ensures high reliability and excellent long-term stability. This work is implemented using a programmed Node Mcu board for providing the required intensity of light at various times. The proposed work has achieved a better performance compared to the existing system. Each street light contains their respective LDR and red LED, this LDR is used to sense the street light and ON the red LED automatically, in case of a faulty lamp. The location and the message will be sent to authorized phone number through cloud storage. The exact location will be fetched through the GPS. These contains Bluetooth data which consists of longitude and latitude of the faulty light. After fixing the damaged lamp, the red LED will get OFF automatically