**TOPIC**

**IOT BASED SMART STREET LIGHT**

**CONTROLLING AND MONITORING SYSTEM**

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**ABSTRACT**

The project entitled “Smart Street Light Monitoring and Controlling” is developed for automatic street light monitoring to ensure, low power consumption, consumption monitoring, instant faulty light detection and light dimming as per external lighting conditions and also light dimming through motion detection.

The application is designed in such a way that we place light sensors in all street light circuits, which is responsible for switching off and on automatically. Once the lights are switched on current sensors placed at every street light are responsible to report problem status to the centralized system with help of GSM module attached with the circuit. The status of each light is available in this system the workman can easily locate the particular light to take care so that can minimize the time to search the light and repair.

**INTRODUCTION**

A well-designed, street lighting system should permit users to travel at night with good visibility, in safety and comfort, while reducing many malfunctions occurs during night and enhancing the appearance of the neighborhood. Poorly designed lighting systems can lead to poor visibility which may not be helpful for pedestrian and who are passing by that street.

Quite often, street lighting is poorly designed and inadequately maintained and uses obsolete lighting technology, thus consuming large amounts of energy and financial resources.

The application is designed in such a way that we place light sensors in all the street lights circuit and which are responsible to switch on and off automatically. Once the lights are switched on, current sensors placed at every light pole are responsible to report problem status to centralized system, the help of GSM module attached with the circuit. With the status available in centralized system, the workman now can easily locate the particular light. The system is also provided with dim and bright technology with help of Motion Detection sensors so that the consumption of energy can be reduced and increase the life time of street lights.

**ADVANTAGES**

* + Energy Management
  + Smart World
  + Cost Saving
  + Efficient
  + Accessibility
  + Renewable Sources
  + Reduce human resources
  + Increase lifetime of street lights
  + Alert notification
  + Automation

**BLOCK DAIGRAM**

**PIR**

**LS**

**CS**

**Relay**

**328**

**MC**

**Monitoring**

**Station**

**AC Blub**

**LDR**

**PIR- Passive Infrared Sensor**

**LDR- Light Dependent Resistor**

**MC- Micro Controller**

**CS- Current Sensor**

**LS- Light Sensor**

**AC- Alternating Current**