**Streetlight Monitoring System**

Streetlights are a significant source of energy consumption. Often, streetlights continue to remain on even when there’s no one in the street. With the help of this IoT-based streetlight monitoring system, we can efficiently monitor and optimize the energy consumption of streetlights.

In this IoT-based project, street lights are fitted with LDR sensors that can monitor the movement of humans or vehicles in the street. If the sensor can catch any movement in the street, it signals the microcontroller, which then turns on the street light. Similarly, if there’s movement in the street, the microcontroller switches the lights off. This way, a substantial amount of energy can be saved. This is one of the best IoT projects for safety.

Not just that, the smart light system also allows users to monitor the estimated power consumption based on the current intensity of a streetlight. It is incorporated with a load-sensing functionality that can detect any fault in the lights. If the system detects an error, it automatically flags a particular light as faulty and sends the data over to the IoT monitoring system so that it can be fixed promptly.