

Vehicle Movement Based Automatic Street Light Control System

DS Dissanayake, N Wedasinghe

Department of Information Technology, Faculty of Computing, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

Abstract. Lighting and the energy consumed by the streets these days create a huge energy demand. At night, all street lamps operate on a traditional street lighting system. To avoid this problem a proper energy-saving system and lighting control should be implemented. The proposed task is to switch on the lights when there are no vehicles on the streets and to activate them automatically when vehicles arrive. The proposed method can reduce the total energy required per day for lighting. Automated and intelligent control schemes are needed to control the complex lighting system due to the growth and living conditions of the cities. The project aims. to provide automated control and monitoring of street lighting. The project provides for the design of a lighting system that aims. to save energy and operate independently on the streets at low cost and on-site treatment on complaints. The energy consumption of the street light in a target area can be recorded and incorporated into the energy-saving lighting system with the included sensors and controllers. Besides, errors caused by guided activism can be eliminated. The street lamp can be turned ON / OFF from the primary handling point, or the light sensors included in the software's street light polar circuit can be used automatically. With those centers, you can increase the overall functionality and lifestyle of the lamps. The software is primarily based entirely on the customer client model.

Keywords: *Sensors, GSM module, Microcontroller, Street light Controlling, Fault Detective*