Arduino Based Automatic Street Lighting for Energy Conversion

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Abstract: *The objective of the project is to provide automatic control and fault detection of street lamps. The lighting system which targets the energy and automatic operation on economical affordable for the streets and send information about the street lamp fault to the control room. Moreover, errors which occur due to manual operation can also eliminate. The street light system is checking the weather for street lamp ON/OFF condition. The weather is bright or dark, are sense through a LDR sensor. If the weather is bright, the system will be OFF otherwise system will be ON. The light condition is also used to check the lamp glowing status through LDR sensor. If light glows then the sensor sends the value to street light system through the Wi-Fi module. Here, also the PIR sensor is used to measure the motion of vehicle or any other object. According to the program, whenever there is no vehicle cross as the PIR sensor, the light will glow as dim. Otherwise, the light will glow as bright.*

Keywords: Battery, Arduino, IR sensors, LED, Solar Panel, Power supply, etc.

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