ABSTRACT

Farhan Anggara, 22118507
Prototype sistem *monitoring* penerangan jalan umum berbasis *internet of things* (IOT)
AScientific Research. Computer System.Faculty Of Computer Science and Information Technology. Gunadarma University. 2022.
Keywords: Blynk, LDR, NodeMcu, Infrared, LED, IOT

(Xii + 40 + *appendices*)

Public road lighting is an important facility and must be available on every public road because it is very useful for every motorist, especially at night. The intensity of the light that must be given must be bright enough so that it can provide a clear view for the driver. Currently, some public street lighting in certain areas still only uses switches and only lights up at night. Meanwhile, when the sky is cloudy, the street lighting turns off and we don't know the condition of the lamp. Whereas when the sky is cloudy especially accompanied by heavy rain, the driver's view is often very limited and requires lighting from the public street lighting. This public street lighting should be designed using an automatic system that can monitor the state of the light. Which makes it easier for street officers to know the condition of the lights when it's raining or at night. Automation systems that have been programmed in such a way can assist humans in completing their work. Likewise with public street lighting, when an automation system is installed, of course this will make work easier. Intelligent public street lighting is a source of lighting on public roads that can work automatically. At night the lights will turn on and during the day or when the light is dim, the lights will turn off because this system has an LDR sensor installed as a light detector. Also, in this public street lighting system, the author adds an IR sensor to adjust the light intensity when a car or person passes by and uses a flash to determine the condition of the lamp. The success rate of the test is carried out from the LDR sensor as a light detector. Of the 15 attempts, 4 failures occurred due to an error component. Then the IR Sensor functions properly to detect passing objects and has a distance reading of up to 7cm with a 100% success rate. Blynk works well as a notification of the condition of the LED. So it indicates the system is running well.

Bibliography (2015-2022)