# ABSTRACT

The IoT-Based Smart Street Light Monitoring System was developed in response to the problem of premature damage to street lights that often occurs and is not known by public street lighting maintenance officers. Because of this, it takes quite a long time to find damage to the lights and make repairs, so that it can interfere with the comfort of road users and pose a potential danger. The proposed system will be equipped with various sensors and software that allow users to monitor the condition of street lights in real-time, so as to facilitate the maintenance of public street lighting. In addition, this system can also identify damage to street lights automatically and notify road maintenance personnel to make repairs. This system can be operated online through the website, making it easier for users to access data and make settings without having to be near the location of street lights. With this IoT-Based Smart Street Light Monitoring System, officers can get warning or damage notifications when street lights are detected by the system emitting less light intensity than they should. Officers can also monitor the temperature and humidity conditions of the area around the lamp with an accuracy of 96.98% and 79.34% respectively from the sensors that have been installed on the lamp. Finally, officers can see the electricity expenditure from the wattage of the lamp used and the operating hours of the lamp.

Keywords: Damage, Energy, IoT-Based, Monitoring, Street Light