

# ***DESIGN AND DEVELOPMENT OF CLASSIC MOTORCYCLE SECURITY SYSTEM BASED ON IoT***

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## ***ABSTRACT***

*The increasing growth of motorcycle users makes the quality of motorcycles getting better in terms of technology, for example a security system that is equipped with a double lock. However, the security of a classic motorcycle vehicle is inadequate because in the year of manufacture of the motorcycle the technology of the security system on the motorcycle was not as sophisticated as it is today. In this final project, a classic motorcycle security system based on the internet of things (IoT) is designed, with a classic motorcycle security system using a Neo-6m GPS sensor as a vehicle position tracking and equipped with an ESP32 Cam as an image capture around the vehicle. Input data starts from GPS Neo-6m as a vehicle tracking sensor, ESP32 Cam as an image catcher around the vehicle, SW-420 sensor as an alert sensor for vehicle parking conditions. All inputs will be sent to NodeMCU 8266 to be processed to be forwarded to the buzzer module output as a sign if the vehicle is stolen and the relay as an electric circuit breaker in the vehicle if there is a vibration in the vehicle so it will not be able to turn on. From the test results, it is known that the system can work well in controlling the relay and GPS tracking that is sent to the blynk application. For the presentation of the test results of the SW-420 and Relay sensors, it can be seen that the accuracy rate is 100%.*

**Keywords:** *Internet of Things, Vehicle security, GPS Neo-6M, NodeMCU ESP8266, Blynk*