

## **ABSTRACT**

Pollution is one of the things that must be considered in this world. The significant contribution to air pollution that can interfere with health is 80% of emissions from transport sector, followed by forest fires, industrial pollutants, and other activities. Vehicle emissions result from incomplete combustion that occurs in motorized vehicles. In this study, the authors built a system to monitor the vehicle user condition based on the emissions generated using Internet of Things (IoT) technology. The monitoring of motor vehicle emissions uses an Arduino Uno R3 as a microcontroller. MQ-2 as a hydrocarbon (HC) gas sensor, MQ-7 as a carbon monoxide (CO) gas sensor, and ESP 8266-01 as a WiFi (Wireless Fidelity) module. This system is tested based on its functionality and performance of the system. From the results of the tests, the system functionality runs 100% according to its function. For system performance in monitoring motor vehicle emissions, this system can distinguish "good" or "bad" vehicle conditions with the standards set in the regulations of the Indonesian Ministry of Environment

**Keywords: IoT, Monitoring, Exhaust Emissions**