

**RANCANG BANGUN ALAT MONITORING KEBAKARAN LAHAN KELAPA SAWIT
DENGAN MODUL NODEMCU ESP8266 MENGGUNAKAN SENSOR MQ 135
BERBASIS APLIKASI ANDROID**

Ari Budi Susilo

Program Studi Teknik Komputer, Fakultas Sains dan Teknologi

Universitas Teknologi Yogyakarta

Jl. Ringroad Utara Jombor Sleman Yogyakarta

E-mail : aribudisusilo4@gmail.com

ABSTRACT

Forest or land fires in Indonesia remain underway repeatedly because Indonesia itself has a reasonably extensive forest and plantation spread across islands throughout Indonesia. The fire itself occurred due to several factors such as legal land clearing and human negligence such as burning garbage and dumping cigarette butts carelessly, which triggered land and forest fires. The fire impacts all living things in the vicinity; the fire has not been fully contained until now. Therefore, the study designs the Oil Palm Land Fire Monitoring Tool with the NodeMCU ESP8266 Module using the MQ135 sensor based on the Android Application. Using the MQ135 sensor is expected to detect fire smoke and use the NodeMCU ESP8266 microcontroller to send data to the database and then display it in applications designed to display that data.

Keywords: Fire, NodeMCU ESP8266, MQ135, Android