

## ABSTRACT

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*The current state of the earth's air condition is becoming worse due to air pollution. Gas emissions produced by vehicles are the major contributor to air pollution. The exhaust gas emission usually occurs due to the insufficient combustion from the engine's exhaust and combustion systems. Moreover, the lack of oxygen amount during the combustion process releases particles. Thus, it causes gas emissions. In order to prevent damages toward air conditions, countries worldwide provide emission standard limits for vehicles, specifically for the four-wheeled vehicle. Therefore, the instrument which is capable of quantifying gas emissions such as carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), and hydrocarbon is developed using Arduino. The measuring device can provide simultaneous and real-time result.*

*Keywords: Emission Gas, And Co*