Abstract
The increase in the number of vehicles in the city of Bandung always occurs every year. The number of vehicle activities will certainly make the density of vehicles in an area. The occurrence of vehicle density will increase the pollution that occurs in the area. The resulting pollution is carbon monoxide (CO) gas that comes from vehicle exhaust emissions. In this final study, the aim is to detect the status of vehicles at the Soekarno-Hatta intersection in Bandung. The NodeMCU microcontroller device, MQ7 sensor and DHT11 sensor will be used to collect data on carbon monoxide gas, temperature, and humidity in the Soekarno-Hatta intersection area of Bandung city. The Nave Bayes method is used for the classification process in predicting the density status of vehicles based on carbon monoxide gas parameters. There are 3 parameters of the resulting density status, namely low, medium, and high. The results of the research that have been carried out, the device that has been built can detect carbon monoxide gas levels, and the use of the Naive Bayes method in predicting density status has an accuracy of 88.95% from the dataset that opens 603 data.