# ABSTRACT

The increasing number of private vehicle ownership that not followed by the development of adequate transportation infrastructure causing traffic problem. Along with the development of technology, first in the field of transportation, developed and developing countries began to implement Intelligent Transportation System (ITS) to improve transportation capacity and infrastructure, reduce congestion, make it easier to get traffic information. One of the applications of Smart Transportation Systems is the use of an Internet of Things (IoT) based car counter system. Based on these considerations, researchers examined a system that can perform car calculations in real time based on Internet of Things (IoT) so that vehicle volumes can be easily monitored directly through the Node-Red dashboard. The use of ultrasonic sensors in retrieving vehicle distance data is then processed using the Default Value of the Threshold (DVT) single lane method so that it gets an error rate of 0.5% in the calculation of car vehicles.

**Keywords:** intelligent transportation system, internet of things, ultrasonic sensors, car counter, default value of the threshold