

## ABSTRACT

The car is one of the most widely used public transportation especially in Indonesia, so many people are starting to learn to drive a car. An accident is very close to driving, especially when parking a car in a garage. Parking backward in the garage can be a problem for drivers especially beginners because if they make a little mistake can hit the garage wall. According to the founder of the Jakarta Defensive Driving Consultant (JDDC), Jusri Pulubuhu : “Reverse parking is in the accident category but it often happens. I love examples such as insurance in North America and Australia, the most claimed accidental parking reverse.” It’s means parking backwards often results in accident, what makes drivers difficult to park backwards is the lack of backward visibility. This Final Project aims to design a vehicle safety parking distance detection system by utilizing the concept of Internet of Things (IoT), which is by using Breadboard, Node MCU, Sensor Ultrasonic, Buzzer and Relay. The device is mounted on the back wall of the garage, Data from a distance is obtained through an Ultrasonic Sensor then sent using the MCU Node into the database, after that the data will be consumed by the android application to be displayed on the layer so that it can help the driver in monitoring the distance during the parking process.

**Keywords:** Car, Parking, Android, Object, IoT