



**WEB-BASED PARKING SYSTEM INTEGRATED WITH
THE INTERNET OF THINGS**

UNDERGRADUATE THESIS

**Submitted as one of the requirements to obtain
Sarjana Komputer (S. Kom.)**

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CIKARANG

MAY, 2024

TURNITIN CHECK RESULTS

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ABSTRACT

In Indonesia, parking is very important and its availability also contributes to improving the local economy. Sometimes looking for an empty parking spot when we drive to the mall or maybe a company can be very frustrating and time-consuming.

Usually, to overcome this problem, the parking manager will help users by providing information on the parking area manually. Sometimes it helps, but of course, visitors are still looking for space. With the help of this IoT Integrated Parking System, visitors no longer have difficulty finding empty parking spots because the system will show the location of empty parking spots, and visitors can immediately reserve a parking spot before visiting. On the other hand, a new problem will arise, namely the difficulty of visitors finding the last location of their motorbike in the parking lot. This system is also equipped with a Find My Vehicle feature, so visitors will get directions to where their vehicle is located. There will also be an alarm showing where their vehicle is located with assistance. The ultrasonic sensor is connected to the Arduino Uno microcontroller and Node-Mcu.

Ultrasonic will show the availability of parking spots and then send the information to a database which will be captured by the Arduino Uno and nodeMcu will send the information to the cloud and end up with information for the user which can be seen on the Website.

Keywords: *Parking lot, ultrasonic sensor, Arduino Uno*

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