ABSTRACT

AUTOMATIC DISTANCE DETECTION AND VIEWING SYSTEM USING CAR REVERSE PARKING SENSOR BASED ON RASPBERRY

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One nobility in the transportation technologies is vehicle parking technology. The four-wheeled vehicle drivers often have difficulty parking their cars in narrow locations, due to the reduced parking space. Not a few drivers who hit a power pole or scratched a wall when backing their car, this was because the driver did not know the conditions behind the vehicle he was traveling in due to limited vision. The purpose of this study was to make a tool for the driver to be able to see the conditions behind the car and perform automatic braking so that the car being driven did not hit the parking limit using ultrasonic sensors and raspberry-based cameras. The test result of the program system made using python and opencv the system could perform well in displaying videos on the LCD screen and the result of ultrasonic sensor testing found that if the sensor had an error starting from a distance of 180cm to a distance of 270cm.

Keywords: Raspberry, Vehicle Parking, Camera, Ultrasonic.