



PROJECT REPORT
ROBOT VACUUM CLEANER WITH ULTRASONIC
SENSOR AND BLUETOOTH BASED ON ARDUINO UNO

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ABSTRACT

The development of technology today has increased in various fields of human life. The combination of hardware and software can produce complex systems that certainly save production and maintenance costs. In the world of electronics, the emergence of increasingly sophisticated sensors can help humans create a tool that can be used in everyday life for heavy and light work so as to facilitate human work. A robot vacuum cleaner equipped with a Bluetooth controller and supported by an Arduino-based ultrasonic sensor as a rangefinder is a solution for cleaning hard-to-reach parts of the room, saving labor and time. The robot vacuum cleaner can be controlled in two modes, manual and automatic modes, which are identified by a smartphone connected to the robot vacuum cleaner. The robot vacuum cleaner can move forward, backward, left and right. The test results show that the robot vacuum cleaner works well.

Keyword: vacuum cleaner, robot, Arduino