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Autonomous Smart Floor Vacuum and Cleaning System

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Abstract: This paper represents the low cost technology that proposed the working of robot for vacuum and floor cleaning. Households of a today's generation are becoming smarter and more automated, that's way the smart cleaning robot to makes the boring household works to simpler and automatic. The main purpose of this robot is to reduce the human interaction in the cleaning process by using Controller, Motor, Ultrasonic sensor, to achive the goal of this project. The whole circuitary is connected with a 12V battery. The proposed system has mopping section ,vacuum section and fan section. Mopping section consist of a mop attached to the robot which is used for cleaning the floor. It is attached to a small water container from which water dipped on the floor. The vacuum section consists of vacuum pump for sucking the dust particles. The wet section consists of fan to dry the floor. The robot can be controlled by mobile applications, which can turn it ON/OFF, directions etc.

Keywords: Microcontroller, Ultrasonic sensor ,Bluetooth module, Vacuum Cleaner, Brushes, Motor Driver IC, Fan.

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