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Service Robot using Voice Recognition

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Abstract

Nowadays, there is a need to create robots for various purposes and applications due to the increase in the use of robots in different fields. The ease of controlling the operation of the robot makes the robot more functional and beneficial. The use of the robot for different applications has helped to ensuring safety, increasing productivity, improving quality, and reducing wastage. Even though there are many ways to communicate with the robot, but communication with the robot verbally is an easy mode of communication between human and machine and it can be a new communication method. This research aims to develop a voice recognition system used for controlling the service robots. The main objective of this research is to develop a system has that the ability to recognize the voice of the speaker and controlling the movement of the robot using verbal instructions. The application of voice recognition in this project is to identify the speaker and translate the oral instructions into a robot command. © 2023 American Institute of Physics Inc.. All rights reserved.

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