SPEECH CONTROLLED ROBOT

DHINESH KUMAR G, GOKUL B, CHANDRAMOULI K V,DHARUN BABU S

ECE, COMPUTER TECHNOLOGY

BANNARI AMMAN INSTITUTE OF TECHNOLOGY

Area: IOT

Abstract:

The term "robot" usually means anthropomorphic (human-like) some of the research problems for the development of humanoid robots and one of the most important research problems to develop machines with a human-like perspective. -What is the human view - Five ancient human senses - vision, hearing, touch, smell and taste; with it they saw the world around them. The main objective of our project is to introduce a “hearing” sensor and speech integration with a mobile robot capable of communicating with people in the Spoken Natural Language (NL) language. Speech Recognition (SR) is an advanced technology, which helps us to introduce the “hearing” interface and Natural Language (NL) through Human-Robot Communication. So the promise of anthropomorphic robots is beginning to come true. We have chosen Mobile Robot, because this type of robot is becoming more and more popular as a service robot in the social context, where the biggest challenge is to communicate with people. Two of the methods we have chosen are to use the Voice User Interface (VUI) - using the Hardware SR system and the other, using the Software SR program. We have followed Hybrid's construction of standard robots and interaction with the SR system; and developed a grammatical grammar system, selected for robotic activities in his field. Design and both methods of implementation are presented in this report. One of the key objectives of our project is to introduce an appropriate user interface for novice users and our testing program is tailored to our project objectives; therefore we have also tested the functionality of our system using novice users. We have done experiments with simple and complex sentences for different types of robotic operations; and analyze the test result to identify problems and limitations-our biggest goal is to make it easy to use and control.