



FINAL YEAR PROJECT REPORT

**IOT BASED VOICE CONTROLLED
HUMANOID ROBOT**

**In fulfillment of the requirement
For degree of
BS (Information Technology)**

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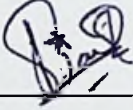
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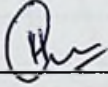
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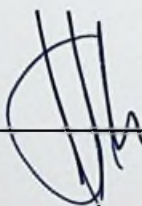
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IOT BASED VOICE CONTROLLED HUMANOID ROBOT

ABSTRACT

Now-a-days robots are playing a very important role in the industry level and also out of the industry. Dependency on robots is increasing for their fast and reliable working speed and accuracy. Humanoid Robot is a robot, shaped in the form of a human. A Humanoid robot is used in many different fields such as education for young children, on field marketing for companies, research and development tool, entertainment and for tasks that are unsafe to be done with real people. So, humanoid robots are a tool for human luxury and safety. This project was conducted focusing on the necessity of robots in our daily life. Internet of Things is nowadays finding profound use in each and every sector, plays a key role in our project too.

IoT is the concept which creates a relationship between user and system remotely. It also creates interconnection between devices. There are three C's on IoT: Communication, Control and Automation and Cost Savings. We have tried to implement IoT so that user can control, communicate with the robot within a low budget. This report proposes a system where a robot can be controlled in different ways like voice and wireless. Here we are using a Humanoid Robot which is capable of moving left, right, forward, backward and picking different objects and can be controlled through voice. The Movement of the humanoid robot is done based on Arduino Uno and we make mobile robot whose motions can be controlled by the user by giving specific voice commands on Google Assistant. When a command for the robot is recognized, then voice module sends a command message to the robot's controller. For controlling the mechanism of the robot and object we write the program in Arduino. The design included various units mainly: sensing unit, processing unit, power unit, display unit, communication unit. This work will apply the techniques of electrical engineering.

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