**ABSTRACT**

Speech based home automation uses human voice commands to operate the electrical appliances in the home. It’s very useful for human beings especially for elderly and physically handicapped

Implementation details of two schemes for speech based home automation and control. The first scheme uses a HC-05 Bluetooth module and Arduino Bluetooth controller mobile application for switching on or off the appliances.

Second scheme uses GSM/GPRS technology for controlling the electrical appliances. This system is implemented on ARM11 raspberry pi microcontroller board. Python integrated development environment is used for developing the necessary software.

After execution we can controlling the home functions and features automatically or remotely and Providing security surveillances to the home, Using web cam we can control and monitoring of appliances.

INTRODUCTION

Home automation refers to the automatic and electronic control of household features ,activity and appliance

speech based home automation gives us access to control devices in our home by giving speech commands using a mobile phone remotely

The electrical switch boards located in different rooms of our home make it difficult for the members in the home, especially ,the elderly and physically handicapped to operate them.

**LITERATURE SURVEY**

Tharanya and sangeetha presented a speech recognition based HAS consisting of web server application and android application[1]

Khusvinder Gill et al proposed a system which controls home appliances using ZigBee remote control locally and uses the homes Wi-Fi network[2]

Sunehra and veena implemented for remote controlling of the home appliances through the subjects of an email[3

**METHODOLOGY**

**EXPECTED RESULTS**

* After execution we can controlling the home functions and features automatically or remotely
* Providing security surveillances to the home



Fig : experimental result for speech based command ‘ light on ‘

**ADVANTAGES &APPLICATIONS**

* Home automations
* Used in industrial areas
* Used in any working places(office, college etc)
* Used in hospital

**CONCLUSION**

* Two schemes for a prototype speech based home automation system are implemented using Bluetooth and GSM technologies respectively.
* The speech based HAS using Bluetooth is especially useful for elderly and physically handicapped people staying at home. The GSM/GPRS based scheme is used for remotely controlling the electrical appliances.

**BIBLIOGRAPHY**

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[2] khusvinder Gill, shuang-Hua yang, fang yao,Xin lu,” A ZigBee-based home automation system “,IEEE transactions on consumer electronics vol.55,NO.2,May 2009,pp.422-430

[3] sunehra ,veena implemented a interactive home automation system based on email and Bluetooth technology