**CHAPTER 1**

**INTRODUCTION**

**CHAPTER 2**

**LITERATURE SURVEY**

**2.1** **SMART BELL USING IOT**

Ambika, Baswaraj Gadgey, Veeresh Pujari, Pallavi B V, International Journal for Research in Applied Science & Engineering Technology (IJRASET) (2017).

This paper gives basic idea of how to remotely monitor and control door. It will work as and when bell rings at the door or any motion is sensed at the door, it will act as a trigger to the camera and the camera will capture the image of the person standing in front of the door, that will be shown to the registered user who is away from home and then he will identify the person and through the web server he can control the door lock.

Smart home security control system has become indispensable in daily life.

The design and development of a home security system, based on human face recognition technology and remotely monitoring technology, to confirm visitor identity and to control door accessibility has been reported in this paper.

**2.2 IOT SMART BELL NOTIFICATION SYSTEM:DESIGN AND IMPLEMENTATION**

Woo-hyuk Park and Yun-gyung cheong, 19th International Conference on Advanced Communication Technology (ICACT) (2017).

In this paper, they provide a security system that combines the functions of smart phone and home network system. It enables the users to monitor visitors in real-time, remotely via the IoT-based doorbell installed near the entrance door to a house.

If an outsider breaks into the house, the system can help identify the trespasser by acquiring CCTV evidence. Furthermore, this system can be used to report to the police or home security service provider immediately when a trespass occurs.

The design and development of a home security system combined with the functions of smart phone and home network system to confirm visitor identity has been reported in this paper.

**2.3 RASPBERRY PI BASED SMART DOORBELL**

Jie-Ci Yang, Chin-Lun Lai, Hsin-Teng Sheu and Jiann-Jone Chen, MDPI journal (2016).

The proposed system will allow to communicate between visitors and owners of the house. Video camera system (the photo of visitors will be sent to the owner of the house), instant message notification, SMS / MMS notification and dual audio / single sided process will be provided with videophone.

In addition, cloud storage of image data with a high resolution will be provided using the system with increasing safety and security is-sues, the use of smart door system increased consistently with the advent of security related electronics, such as digital door locks, advanced video conversation devices, and wire-less home security networks.

The design and development of a home security system combined with the functions of video camera system along with cloud storage to ensure security has been reported in this paper.

**2.4** **ARDUINO BASED WIRELESS DOOR BELL**

Anusha (Electronics Hub)

The aim of this project is to design a simple and cost-efficient wireless doorbell. This project is designed an Arduino based Wireless Doorbell using simple hardware.

The project is implemented using RF Module for wireless communication and also an Arduino UNO board to analyze the data

In order to ring the bell (or buzzer in this case), we need to push the button on the transmitter side of the circuit. When the button is pushed on the transmitter side, a logic ‘0’ will be detected by the Encoder IC. The Encoder IC will transmit this data serially through the RF Transmitter Module.

The transmitted data will be received by the RF Receiver Module and is given to the Decoder IC. The Decoder IC, then decodes the serial data to parallel data and transmits the Logic ‘0’ to Arduino. In the Arduino UNO’s, it is programmed such that, whenever a Logic ‘0’ is detected by the Arduino, the buzzer is turned on. Hence, whenever the button is pressed, the buzzer is turned on wirelessly.

The design and development of a home security system combined with the functions of RFID based system to ensure security has been reported in this paper.

**CHAPTER 3**

**SCOPE AND OBJECTIVES OF THE PROJECT**

**CHAPTER 4**

**HARDWARE DETAILS OF THE PROJECT**

**CHAPTER 5**

**SOFTWARE DETAILS OF THE PROJECT**

**CHAPTER 6**

**RESULTS AND DISCUSSION**

**CHAPTER 7**

**CONCLUSION**

**REFERENCES**

1. Ambika, Baswaraj Gadgey, Veeresh Pujari, Pallavi B V “Smart Bell Using IOT” International Journal for Research in Applied Science & Engineering Technology (IJRASET) (2017).
2. Woo-hyuk Park and Yun-Gyung cheong “IoT smart bell notification system: Design and implementation” 19th International Conference on Advanced Communication Technology (ICACT) (2017).
3. Jie-Ci Yang, Chin-Lun Lai, Hsin-Teng Sheu and Jiann-Jone Chen “An Intelligent Automated Door Control System Based on a Smart Camera” http://www.mdpi.com/journal/sensors (2016).
4. Arduino based Wireless Doorbell: www.electronicshub.org/wireless-door-bell

**PUBLICATIONS / CONFERENCE CERTIFICATES**