



## AN IMPLEMENTATION ARM7 BASED PANIC BUTTON FOR SECURITY EMERGENCIES

M. MADHAVARAO<sup>1</sup>, CH.NAGA PHANEENDRA<sup>2</sup>

1 M.Tech [ES] PG Scholar, Department of ECE, St.Mary's Group of Institutions, Guntur, Ap, India.  
madhavmg143@gmail.com

2 M.Tech, Asst Professor, Department of ECE, St.Mary's Group of Institutions, Guntur, Ap, India.  
phani.chirukuri@gmail.com

**Abstract:** Invention of internet gives us a plate from which we make our life faster, easier and less complicated, now here a new plate from is invented called as IOT (internet of things) in which various devices are connected huge data at any time anywhere, IOT has various application in different fields so this project review is based on wearable devices which work on IOT. In today's scenario safety of women is biggest problem so to minimize this problem we have studied some devices which are used in rings, jackets etc. which works on IOT. Also we have studied on IOT system that include wearing glass and walking assistant for blind people and we have studied .

**Keywords:** ARM7 Controller, Panic Button, GSM, GPS.

### 1.Introduction

The status of ladies in India has been liable to numerous extraordinary changes in the course of the last couple of centuries. In current India, Women are dealt with on parallel grounds with men. They have turned out to be Independent and are keeping pace with the evolving patterns. Be that as it may, in a few sections ladies still keep on facing separation and other social difficulties and are regularly casualties of mishandle and vicious violations. Because of these reasons

it has turned out to be vital for females to remain alarm and handle every single such circumstance proficiently when they are distant from everyone else. Ample opportunity has already past that we furnish ourselves to manage such overwhelming circumstances. Neither ladies nor their families need to stress over the time or places when they go out. All they require is a gadget that can be conveyed effortlessly and worn at whatever point the lady feels risky. Here we present a wearable ring which ordinarily fills in as a common watch.



It additionally fuses a IOT unit that will help the casualty to speak with their family or police at the main indication of inconvenience. It additionally actuates an alert from the telephone which is associated by means of IOT. This empowers to pick up consideration of others to the situation. This requests the need of extra equipment which brings about expanded size and weight. Every one of these imperfections can be amended by utilizing the IOT innovation so the capacities like following, informing and ready caution can be performed with the assistance of an advanced cell on accepting the charge. The caution will get enacted and ready message with area will be sent to a predefined number.

## **2.Literature survey:**

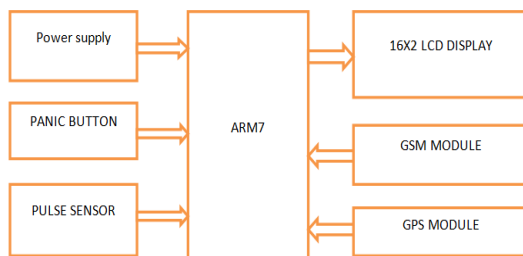
Orlando pereira, et al (2010) proves the theory of using body sensors by using Network mobile solutions for biofeedback monitoring. Firm ware and Bluetooth firmware has been implemented in this work. The limitations of this work is Bluetooth should be always connected to phone, it cannot be used if phone is lost[1].Mirjam Jutila, et al(2014) proves the new concept of a wearable sensor vest for children. Safety vest Design, Gateway

Implementation, Sensor web elements has been implemented in this work. The limitations of this work is the device used is very begin size, it cannot be carried to places all can go [2].Samuel Tanga (2016) proves the concept of sensors in his work Development Of Prototype Smart Home Intelligent Lighting Control Architecture Using Sensors Onboard A Mobile Computing System."Luminarie controlled by the Arduino microcontroller" has been implemented. The limitations of this concept is Wi-Fi or internet is needed to work the application[3]. Threats in Information Security are life-threatening more particularly in medical field. [4]. Software providing more features and more security leads to increased execution time and also leads to poor usability of the software [5].The application can be secured with finger print authentication for providing more security and to avoid false positive [6]. The Dynamic Cognitive System shows how the application can be protected against vulnerabilities and attacks in the social network [7]. Parthsethi et al(2018) proves the theory of using alarm system in his work published in "Safe sole Distress Alarm system for female security using IOT".

"Central controller, GSM module, GPS module gesture control System, smart phone connecting". Limitations of this work is the click in a mobile is needed there is no automatic detection [8].

### 3. Block Diagram:

The below figure is hardware module contains ARM7 .Once the panic button pressed buzzer activates Then server send image link to the smart phone when victim select the emergency contact.



**Fig: 1 Block Diagram**

### 4. Overview Block Diagram

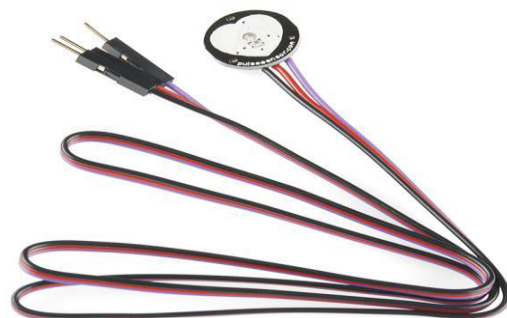
**4.1 Power Supply:** This section is meant for supplying Power to all the sections mentioned above. It basically consists of a Transformer to step down the 230V to 9V followed by diodes. Here diodes are used to rectify the ac to dc. After rectification the obtained rippled dc is filtered using a capacitor Filter. A positive voltage regulator is used to regulate the obtained dc voltage.

**4.2 ARM7:** ARM is the abbreviation of Advanced RISC Machines, it is the name of a class of processors, and is the name of a kind technology too. The RISC instruction set, and related decode mechanism are much simpler than those of Complex Instruction Set Computer (CISC) designs



**Fig:2 ARM7 controller**

**4.3 Pulse Sensor:** the heartbeat sensor is used to check the heartbeat rate. Heart rate data can be really useful whether you're designing an exercise routine, studying your activity or anxiety levels or just want your shirt to blink with your heart beat heartbeat sensor which will constantly detect the heartbeat rate.



**Fig 3: Pulse Sensor**

## 4.4 Panic Button

A switch is a mechanical gadget used to associate and separate an electric circuit voluntarily. The Silent Beacon emergency alert system helps you instantly connect with loved-ones or emergency personnel in an life alert emergency situation at the push of a panic button

## 4.4 GSM And GPS

The hardware module send image to the server and ping to the portable application ,it gets the GPS area and send SMS to the predefined contact number. The SMS contains the GPS area and URL of the picture.

## 5.Result

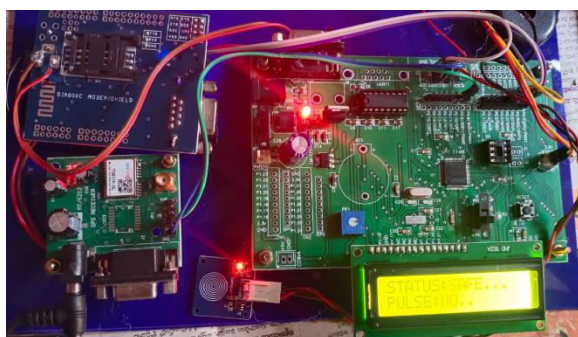


Fig 4: Hardware Implementation

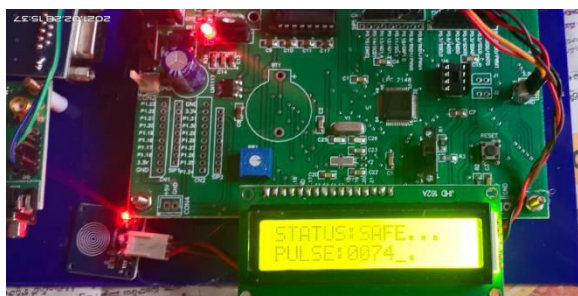


Fig 5: Pulse Beat Generation For Health  
Safety Purpose



Fig 6: Women Is Trouble The SMS Will  
Be Send Corresponding Management

## 6.Conclusion:

Women security is a basic social issue in this day and age. Through this paper we expect to advance an effective and convenient security gadget for ladies. The proposed configuration can deal with some basic issues looked by ladies and will illuminate them with mechanically stable and straightforward hardware. It can be reasoned that this framework enhances the sexual orientation balance by giving safe condition to ladies in the general public, and enables them to work till late evenings. The ring gets fundamental help in any pain and encourage a methods for self-protection. This work is of direct cost, exceptionally compelling, and profitable. Be that as it may, there is dependably opportunity to get better. Expansion of a voice acknowledgment framework for the entrance will enhance the execution.



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