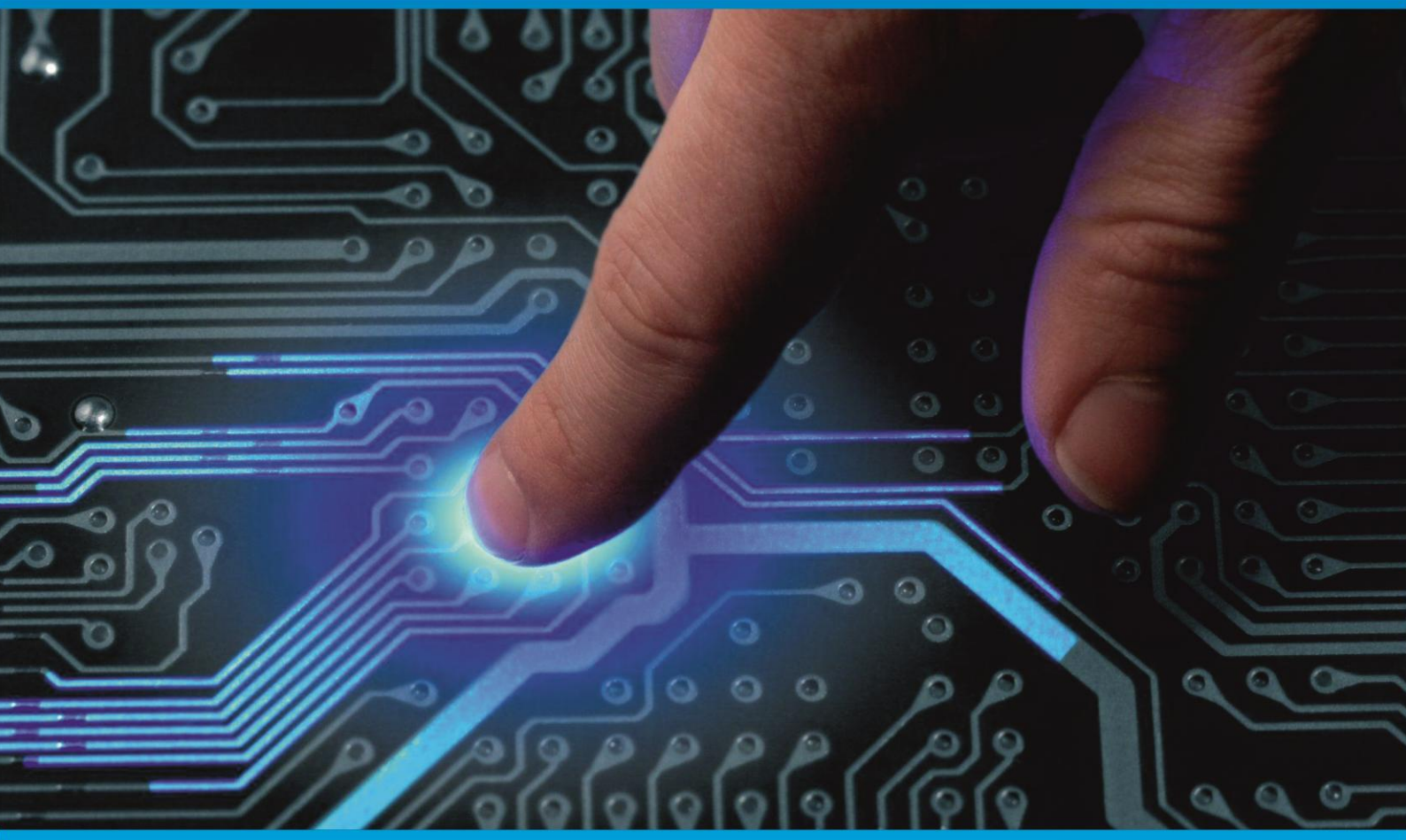
IJIRCCE

e-ISSN: 2320-9801 | p-ISSN: 2320-9798



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

Volume 10, Issue 6, June 2022

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

Impact Factor: 8.165

International Journal of Innovative Research in Computer and Communication Engineering

| e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | |Impact Factor: 8.165 |

|| Volume 10, Issue 6, June 2022 ||

| DOI: 10.15680/IJIRCCE.2022.1006157 |

Wrist Band for Women Security

A. Srija, P. Soumya Devi, S. Charan Reddy, Dr.S.Venkatesulu

Assistant Professor, Department of Electronics and Communication Engineering, St Peter's Engineering College, Hyderabad, Telangana, India

UG Student, Department of Electronics and Communication Engineering, St Peter's Engineering College, Hyderabad, Telangana, India

ABSTRACT: Women's safety is a big problem, Safety of women matters a lot whether at home, outside the home, or working place. It is very true that women in India are given a place of Goddess Lakshmi in society however we also cannot ignore the negative aspect of women's position in India. Many Areas have been the territory of women hunters. We propose to have a device that is integrated with multiple devices, hardware comprises a wearable "Smart band" which continuously communicates with Smartphone that has access to the internet. The application is programmed and loaded with all the required data in which we use the DHT sensor, which monitors the temperature and humidity of the area. The software or application has access to GPS and Messaging services which is pre-programmed in such a way that whenever the button is pressed, it can send help requests along with the location coordinates to the nearest Police station, relatives, and the people in the near radius who have application. This action enables help instantaneously from the Police as well as the Public in a near radius who can reach the victim with great accuracy.

KEYWORDS: Smart Band, GPS, DHT sensor, Battery, Node MCU, Pulse sensor, Smartphone application.

I.INTRODUCTION

Women is God's best creator yet the worst sufferer. The safety of women in India is a serious issues. The crime rate is skyrocketing. Violence against women occurs throughout the life cycle from pre-birth to adulthood. According to the National Crime Record Bureau, In India there is one act of sexual harassment every 59 min, one rape every 34 min. Today's women are facing a lot of issues regarding their safety as advancement of world and technology has resulted in the advancement of crime rates against the women. Hence it has become the outmost priority of the society to provide the required safety for women. This device is a watch, which is easy to carry. The idea behind it is to prevent the harassments and crimes against women and provide safety through smart phone. As it is not possible to have smart phone with the person all the time, we have introduced a smart wrist band for women safety using a Node MCU processor. The location of the person can be tracked using GPS. This Tracking system is basically a combination of the GPS receiver, Node MCU processor and a GPS Receiver grabs the location data from satellites in the form of latitude and longitude. This paper concentrates on security system that can be deployed to provide security to women under situations where they don't feel safe enough. A system is built which detects the location and health condition of person that will enable us to take action accordingly based on electronic gadgets like GPS receiver, DHT sensor, Pulse or heart rate sensor. The heart rate (a normal heart rate for adults ranges from 60 to 100 beats per minute) of a person in such situations is normally higher which helps make decisions. The idea to develop a smart device for women is that it's completely comfortable and easy to use as compared with already existing women security solutions. The smart band integrated with smart phone has an added advantage in cost and size of the band. The GPS can be used of a smart phone. This also enables in reduced power use.

II.LITERATURE SURVEY

Preethu Daniel, Anciya Backer, Shini K.N, SulthanaNazar, Soumya Joseph In this project they proposed an Android Application for the Safety of Women which tries to prevent the threats that might be occur to women. The app works by a single click and identifies the location of place through GPS and sends a message comprising this location URL to the registered contacts to help the one in dangerous situations. Continuous location tracking information via SMS helps to find the location of the victim quickly and she can be rescued safely. [1]

Pallavi Raj, Saikrishna ,Solly Ann Varghese, Unnikrishnan: This proposed system for women consists of a wearable safety device which operates automatically when the pulse rate increases, when women are exposed to harassments in the society. Here the security for the women is provided by the continuous monitoring of the pulse rate.

| e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | |Impact Factor: 8.165 |

|| Volume 10, Issue 6, June 2022 ||

| DOI: 10.15680/IJIRCCE.2022.1006157 |

The pulse rate is detected by using pulse sensors. When the rate of pulse is increased more than that of normal rate, the device will get activated. App is used for location tracking and sends alert message along with the location details are sent to nearest police station. [2]

Komal Singh ,V. Madhavi,B Madhu Yallaraddi: Here in this project they proposed a systemwhich is a wrist band in which it sends the message to the predefined numbers. It is based on a button. The women in trouble she needs to press the button. Then the device gets activated. App is used to send the message forwarded along with the location details to the already added emergency contacts. [3]

Krishna sree, Jeevan Sai, Sri Siri, Ruchitha, Saishma The main purpose of this project is to provide security to the women from dangerous situations. This device consists of button when the button is pressed by the women it takes the current latitude and longitude value of the victim with the help of GP(Krishna sree, 2020)S module. It has pulse sensor which activates and starts sensing the pulse value and sends the message with current location and pulse reading to the family member and police with the help of GSM module. [4]

III.PROPOSED SYSTEM OF WOMEN SAFETY WRIST BAND

The major factor for the women crimes is the lack of communication from the person being at the danger to the respective concern authorities. Instead if we provide an option for the women at those situations where they can send the information to their emergency contacts and other officials then the above crimes can be reduced. The proposed system is intended to alert the authorities to take immediate action, whenever a woman is get attacked. This design deals with the critical issues faced by women. This device helps us to decrease the crime rate against women. There are different modules, in which heartbeat sensor is used for monitoring the heartbeat, GPS is used for identifying the location of the person, a Node MCU micro-controller for controlling the whole process.we use the DHT sensor, which monitors the temperature and humidity of the area.

BLOCK DIAGRAMOF WOMEN SAFETY WRIST BAND

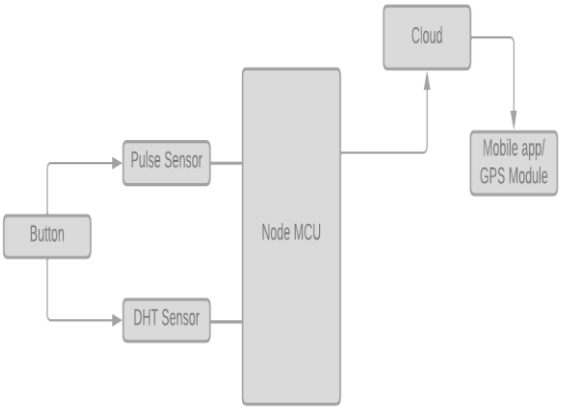


Fig 1:Block Diagram ofWristband for women security

In the above figure the inputs are DHT sensor, Pulse sensor, node MCU and the output will be through the mobile app,uses a heartbeat sensor for monitoring the heartbeat, a GSM modem for identifying the location of the person in trouble, a Node MCU micro-controller for controlling the whole process.we use the DHT sensor, which monitors the temperature and humidity of the area.

| e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | |Impact Factor: 8.165 |

|| Volume 10, Issue 6, June 2022 ||

| DOI: 10.15680/IJIRCCE.2022.1006157 |

FLOW CHART OF WOMEN SAFETY WRIST BAND

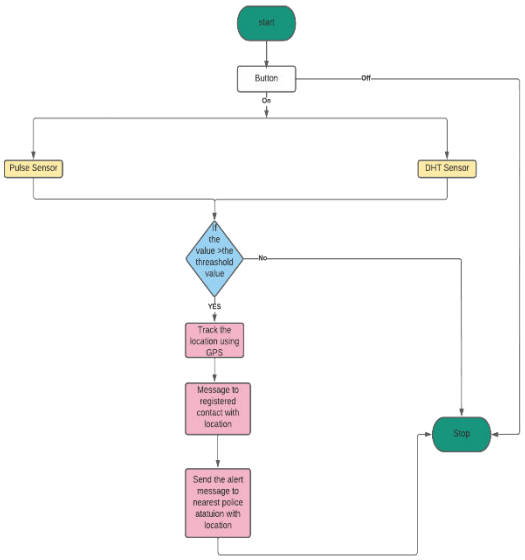


Fig 2: Flow Chart of Wristband for women security

The pulse sensor monitors the heartbeat and the DHT sensor, which monitors the temperature and humidity of the area .Verifies the Predefined values of heart beat and DHT sensor , if those values are greater than threshold value then it immediately tracks the GPS location of the victim and sends the messages to the registered mobile numbers and sends the alert to the nearest police station .If the value is less than the predefined values then it does not sends any message to the registered mobile numbers and to the nearest police station.

IV.CONCLUSION

This project is a short term measurement for the present day harassment against women with variety of features. It gives immediate alert to the predefined number in case of any crime which provides women security. It is certainly a short term and preventive solution. The creation of a hardware and software prototype has achieved two objectives: validation of the proposed architecture and checking whether the utilized technology is appropriate for the system. This system will help its users in difficult situation. This system is highly sensitive and easy to handle. Its quick action response will provide safety and security to individual user.

REFERENCES

[1]Krishna sree, J. S. (2020). *Smart Wrist Band for Women Safety*. Retrieved from International Journal of Innovative Technology and Exploring Engineering (IJITEE): https://www.ijitee.org/wp-content/uploads/papers/v9i8/H6544069820.pdf

[2]Pallavi Raj, S. ,. (2018). *A SMART BAND FOR WOMEN SAFETY*. Retrieved from International Research Journal of Engineering and Technology (IRJET): https://www.irjet.net/archives/V5/i4/IRJET-V5I4728.pdf

[3]Pampapathi B, K. S. (2018). *Smart Band For Women Safety using*. Retrieved from International Journal of Advanced Research in Computer and Communication Engineering: https://ijarcce.com/upload/2018/march-18/IJARCCE%2023.pdf

[4]Preethu Daniel, A. B. (2019). *Smart Band for Women Safety*. Retrieved from International Journal of Computer Science Trends and Technology (IJCST) –: http://www.ijcstjournal.org/volume-7/issue-2/IJCST-V7I2P5.pdf

INNO SPACE
SJIF Scientific Journal Impact Factor

Impact Factor: 8.165

doi cross ref

ISSN INTERNATIONAL STANDARD SERIAL NUMBER INDIA

निस्केयर NISCAIR

INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

9940 572 462 6381 907 438 ijircce@gmail.com

www.ijircce.com

Scan to save the contact details