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Womens Safety System

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Abstract: ***Nowadays, the amount of violence against women has increased by many fold due to the greater exposure of women in every field of life. It has now become a major issue. The crime rate is on the spike. The recent spate of crimes against women, particularly rape instances, has been terrifying. Women\'s safety in India has become a contentious issue as a result of such crimes. Despite international agreements, new legislation, and gender movement, women continue to be particularly susceptible to assault. Looking towards all these issues, we proposed a device which will be really very helpful to women. The system serves main purposes, first to send the victim\'s location to the preprogrammed contact numbers with the help of GPS and GSM. Secondly, she can turn the buzzer on so that nearby people can help her to get out of the situation.. we've got fade a requirement of advanced girls security system to provides the safety live publicly places likewise as travelling alone through public transports such as college Buses, Company Vehicles etc. This paper projected a brand-new model for the women security publicly places that aims to produce the 100 is most popularly liked for this mode of dominant in this application we square measure maintaining a switch. We offer numerous varieties of ways to access. Especially at night women think a lot before coming out of their homes. We daily come up with news of how women are subjected to a lot of violence and harassment or get molested in public areas. This paper focuses on the issue of helping Women that they don't ever never feel alone in the middle of any situations. The project idea is to predict whether the given place at any time is safe for a woman to go or not.***
Keywords: Crime analyze, Visual display, GPS, and a Buzzer.

I. INTRODUCTION

The proposed concept is to build a safety device which will generate an emergency alarm and send a message to the user's friend, family or to the police. This will also help women or concerned during her trouble and keep others alert. By this process location tracking becomes easy.

"848 Indian Women Are Harassed, Raped, and Killed Every Day!!" according to statistics. So, to properly combat this, we developed an approach in which women can self-manage any uncertain event. A day when the media will broadcast more of women's success rather than harassment, that will be a feat achievement!

For a well groomed 21st century, self protection became a priority which can be achieved with the help of user friendly safety device provided with GPS tracking and alert.

Crime control, public security especially women security are serious concerns for any country around the world. Police and various intelligence agencies constantly work for the same. Despite constant efforts, patrolling and using different types of technologies, equipment and methods like CCTV surveillance regularly, aerial inspection through simple camera drones (for serious cases) to control the crime, a significant change could not be observed. In the present scenario, women are keeping pace with men in every walk of life but unfortunately at cost of being subjected to abuse, harassment, violence in public and even at their own houses. Women who feel helpless and facing social challenges can use this system. Woman Safety Program would provide a woman to predict a safe place at a given time and could place a SMS alert to the nearest Police department. The program would give the SMS alert to the Police Authorities with the geographical location. Any women / girl can use this system.

II. RELATED WORK

In 2018, "IoT Based Child and Woman Safety" was proposed in the International Journal of Computer Science and Mobile Computing (IJCSMC). Raspberry Pi 3 Model B is used to build the entire system. Python programming is used to interface all the sensors and hardware components. The model includes Raspberry Pi, Voice Recognition, GPS, GSM and MySql database[1].

In 2016, "Smart Security Solution for Women based on Internet Of Things(IOT)" was proposed in the International Conference on Electrical, Electronics,and Optimization Techniques (ICEEOT). The proposed design addresses significant difficulties that women have experienced in the recent past and proposes technology solutions to address them. This software has access to GPS and Messaging services which are pre-programmed. Also includes Bluetooth 4.0 BLE (Bluetooth Low Energy) in order to reduce power use[2].

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In 2020, "A NOVEL APPROACH TO PROVIDE PROTECTION FOR WOMEN BY USING SMART SECURITY DEVICE" was published in International Research Journal of Engineering and Technology (IRJET). The purpose of this project is to be built and detect the location as well as health condition of the person. It also covers a victim-safe and secure electronic system that includes an Arduino controller and sensors including temperature, pulse rate sensor, and sound sensor[3].

In 2020, "SMART GADGET FOR WOMEN SAFETY" was published in JOURNAL OF CRITICAL REVIEWS. This proposed system serves two purposes, first to send the image of the culprit to the family member by connecting to the internet of the user's phone, and second is self defense by flashing led light into the eyes of the culprit. However the live location can be traced using a GPS module. The system utilizes elements like Raspberry pi, GPS, Panic Button, USB Camera[4].

In 2016, "Women Safety Device and Application-FEMME", was proposed in Indian Journal of Science and Technology. In this paper they used an ARM controller and an android application in which both the device and the smart phone are synchronized using Bluetooth, hence both can be triggered independently[5].

In 2014, "SMART GIRLS SECURITY SYSTEM", was proposed in International Journal of Application or Innovation in Engineering & Management (IJAIEM). When enabled, the system looks like a regular belt and uses GPS to follow the victim's whereabouts while also sending emergency messages over GSM (Global System for Mobile communication). The system also incorporates a screaming alarm that uses real-time clock [6].

In 2014, G.Bharathi and L. Ramurthy from Vemu Institute of Technology proposed "Children Tracking System Using Arm7 Microcontroller" in International Journal of Industrial Electronics and Electrical Engineering. It was a very basic system which was able to provide only the location of the user via GSM.[7]

In 2016, "A Review on IOT Based Smart GPS Device for Child and Women Safety Applications" was proposed in the International Journal of Engineering Research and General Science. It proposed the concept of providing data over a web server[8].

III. PROBLEM STATEMENT AND SOLUTION

Our problem statement is to make women feel safe after stepping out of their homes. In the past years, rehabilitation centres, many NGO'S and helpline numbers have been made operational. But they are not the preventions that we need, they are just all cures to the harassment that has already happened. Women could walk around freely, without the fear of being attacked at anytime, anywhere by our predictions of which place is safest at a particular time. To solve this problem, we have chosen machine learning technology. In machine learning we have different types of algorithms that are suitable for our problem statement.

IV. METHODOLOGY

In order to use the app, a user must first register and then fill up his personal information, any requirements an app has the system is for Android apps. The user must enter their destination after successfully logging in to the app; if the destination is entered correctly, a map will be displayed; it indicates if a route is safe or unsafe, then take the cautious course. There are two methods the user can protect himself from any negative effects if he has any issues following the safe route.

Algorithms used in this Google map and google-service library for location and use dataset for show safest route. SVM Algorithm: SVM stands for Support Vector Machine. SVM is a supervised machine learning algorithm that is commonly used for classification and regression challenges. Common applications of the SVM algorithm are Intrusion Detection System, Handwriting Recognition, Protein Structure Prediction, Detecting Steganography in digital images, etc. In the SVM algorithm, each point is represented as a data item within the n-dimensional space where the value of each feature is the value of a specific coordinate.

V. CONCLUSION

The idea provided here being first of its kind plays a crucial role for ensuring the Safety of Women that is automatically the fastest way possible. The proposed design will address significant challenges that women have experienced in the recent past and will assist in their resolution through technologically sound devices. With more research and invention, this concept could be utilized in a variety of security domains.

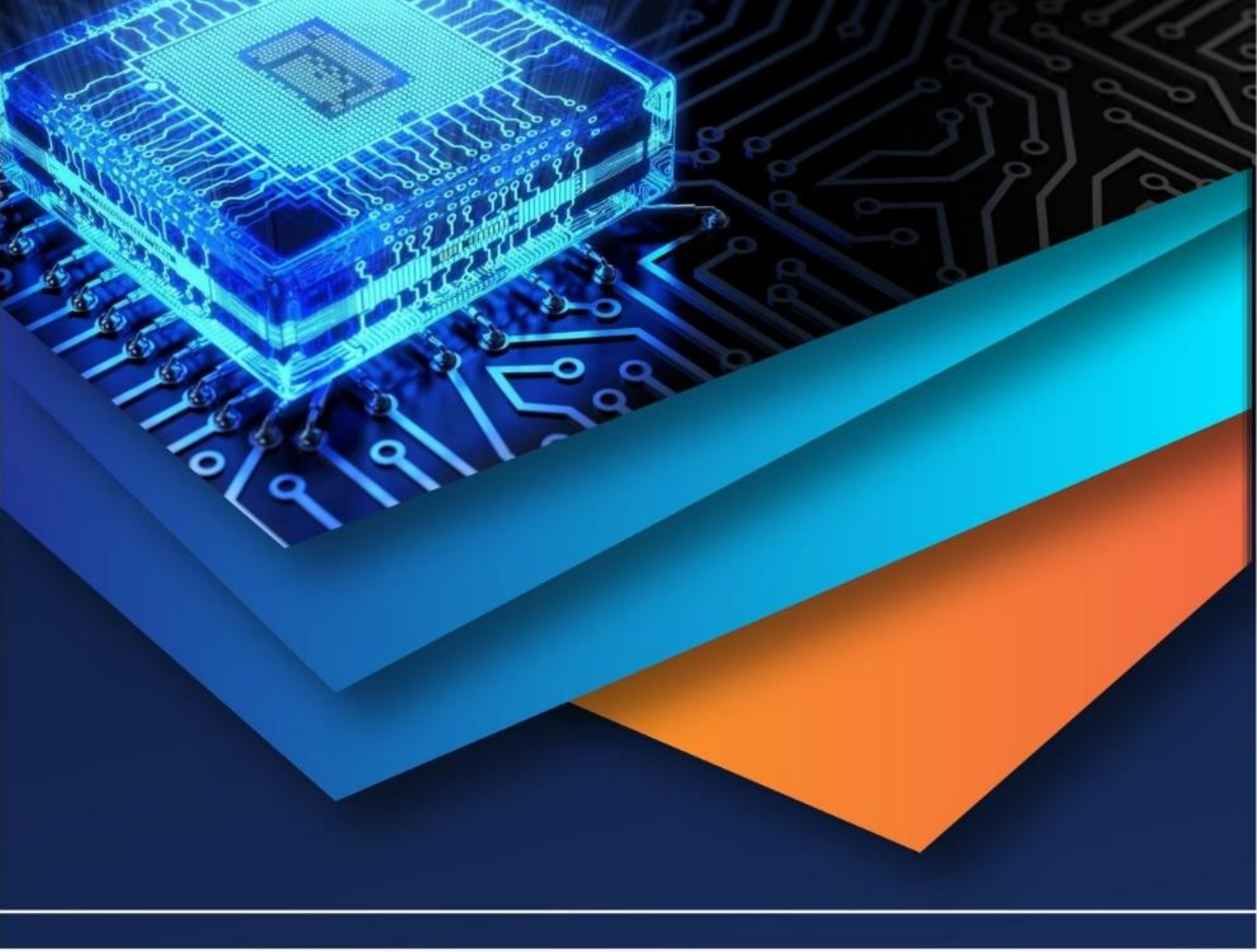
This project about the existing safety application for women and children and comes out with idea for making safe environment for women in the society and allows them to go anywhere fear free. and it help reducing the crime rate against the women. Our Future Scope includes the real time implementation of the proposed system in tiny size with the additional components heartbeat sensor for monitoring the heartbeat of women in every second by measuring variation in blood volume in tissues and analysis of various parameters related to heartbeat for individual women.

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REFERENCES

[1] Mahejabeen Budebhai, “IoT Based Child and Woman Safety”, a paper in International Journal of Computer Science and Mobile Computing (IJCSMC), Vol. 7, Issue. 8, August 2018, pg.141 – 146
[2] G. C. Harikiran, Karthik Menasinkai and Suhas M. Shirol, \"Smart Security Solution for Women based on IOT\", International Conference on Electrical, Electronics, and Optimization Techniques(ICEEOT)-2016
[3] T V. Sai Kalyani, V. Mounika, P. Pooja, V. Sai Sahith, B. Pranay Kumar, C. Akhil Kumar, \"A NOVEL APPROACH TO PROVIDE PROTECTION FOR WOMEN BY USING SMART SECURITY DEVICE\", International Research Journal of Engineering and Technology (IRJET), Volume: 07 Issue: 05 | May 2020
[4] K.Ravikiran, Y.Sharvani,Ch.Rajendra Prasad, \"SMART GADGET FOR WOMEN SAFETY\", JOURNAL OF CRITICAL REVIEWS, VOL 7, ISSUE 17, 2020
[5] D. G. Monisha, M. Monisha, G. Pavithra and R. Subhashini, “Women Safety Device and Application-FEMME”, Indian Journal of Science and technology, Vol 9, DOI: 10.17485/ijst/2016/v9i10/88898, March 2016
[6] Prof. Basavaraj Chougula, Archana Naik, Monika Monu, Priya Patil and Priyanka Das, \"SMART GIRLS SECURITY SYSTEM\", International Journal of Application or Innovation in Engineering & Management (IJAIEM), Volume 3, Issue 4, April 2014
[7] G. Bharathi, L. Ramurthy, “IMPLEMENTATION OF CHILDREN TRACKING SYSTEM USING ARM7 MICROCONTROLLER”, International Journal of Industrial Electronics and Electrical Engineering, Volume-2, Issue-12, Dec.-2014
[8] Niti Shree, “A Review on IOT Based Smart GPS Device for Child and Women Safety Applications”, International Journal of Engineering Research and General Science Volume 4, Issue 3, May-June, 2016
[9] Akanksha Chandoskar, Shraddha Chavan, Yojana Mokal, Payal Jha, Pournima Kadam, “Smart Gadget for Women’s Safety”, Journal paper in International Journal on Recent and Innovation trends in Computing and Communication, Vol. 4, August-2020

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