



One Touch Security System For Women

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ABSTRACT: We would like to propose a one touch security system for women, considering the current insecurity that the women's are facing in our society. Below points will provide you a snapshot on security system. We achieve this through surveillance goggle and security band

and a siren is produced. The system is also capable to generate an small amount of electric shock pulse to

Harm the attacker which may give the victim a small split of time to escape.

I. INTRODUCTION

The violence against women are increasing day by day. Irrespective of the status of the people, whether it is celebs, children or aged people who are being victims of these kind of attacks. In recent days we are hearing the news about a celebrity film actress who physically harassed by some hooligans in our society. The "Nirbhaya" case in delhi and murder case of Jisha which makes us to be helpless. We know that India is the "fourth most dangerous country" in the world for women and the worst country for women among the G20 countries. In such a scenario it is very important to take an action against this.

SMART ELECTRONIC SYSTEM FOR WOMEN SAFETY, This is a type of model that is implemented in transport vehicle such as cars, buses and auto-rickshaws. The electronic system mainly consists of display, keypad, GPS, GSM and an embedded board. Before starting the journey, first of all the passenger will note down the driver's name, mobile number, vehicle registration number and the secure pin is send as SMS to the concern persons. Passenger may not always get down at destination as decided, by chance she may get down little early or little further depending on various factors, hence an option to terminate journey is also provided in this system called as end of journey which is executed using secure pin, which driver will not be aware of. This system mainly uses a serial EEPROM to store various locations of cities and hence new locations can be added and thus this model will work in any city because locations are not hardcoded in the code but it is external to code.

II. LITERATURE SURVEY

SMART GIRLS SECURITY SYSTEM, In this model there is a portable device which has a resemblance with a normal belt. This device mainly consists of ArduinoBoard, GSM/GPS modules, screaming alarm and sensors. When the threshold value of the pressure sensor crosses the device will get activated automatically. At that moment itself the correct location of the victim will be tracked with the help of GPS module and emergency messages will be sent to three contacts saved in the SIM stored in GSM module and one to police control room every two minutes with updated location. The screaming alarm gets activated

III. EXISTING SYSTEM

A. VithU app

This is a simple emergency app initiated by a popular Indian crime television series "Gumrah". If you are in any sort of danger by using this app just you need to click the power button of our mobile 2 times consecutively, then the alert message will be send to your trusted contacts those who you have selected. The

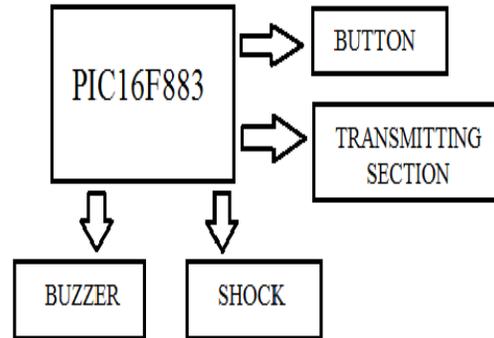


message says "I am in danger. I need help. Please follow my location."

B. The stun gun

As the name suggest the stun gun are small gun like device which can be used to give electric shock to

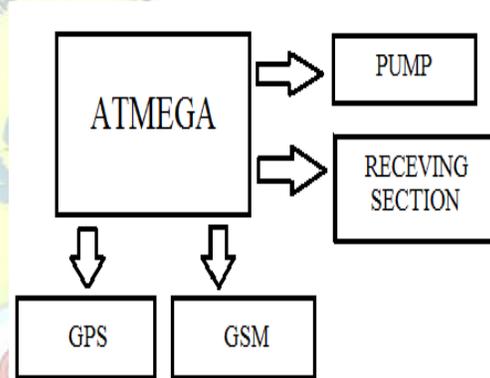
the attacker. The main supply to this stun gun device is from lithium ion batteries and gives an electric shock maximum upto 700,000 volts. Actually this small electric shock is enough to escape from the attacker.



C. Fight back

The fight back is a type of app which is entirely different from "vithu app". In this app instead of giving email or message to the selected contact, the fight back app will updates our facebook status. One of the advantages of this app is that instead of two or three people, all our friends in our facebook account will be notified.

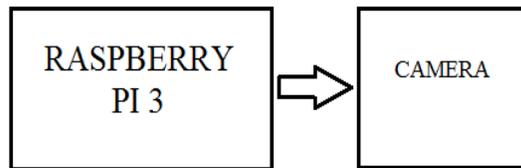
B. Receiving section:



IV. PROPOSED DESIGN

The proposed design is a One Touch Security system for women. Now a day's women are facing much more physical harassment and sexual abuses. But people all over the world are not concerned about their security. Our project is the best remedy for this violence against women. We are introducing two Devices which are a wrist band and a spectacle. The Pressure switch in the band which receives the input and there by a screaming alarm and tear gas mechanism In the spectacle are automatically turned on, and along with it the location and messages are send to the emergency contacts and also figure out the attacker using the live streaming video.

C. LIVE Streaming section:



V. METHODOLOGY

A. Transmitting Section

When the pressure button of the transmitted section is pressed, a signal gets transmitted to the receiving section, at the same time the shock and the buzzer gets activated.

When the signal reaches the receiving section, ATMEGA turns ON, by using GPS, the location of the user is traced out and it is send to the numbers saved in the contact list by using GSM. At the same time



pumping mechanism gets activated and the tear gas is sprayed.

In the live streaming section we are using Raspberry Pi-3, in which a USB camera is connected for live streaming. This section will be always turned ON, so when the button is pressed the link of the live streaming video will be sent to the numbers saved in the contact list by using GSM. [7] discussed about Positioning Of a Vehicle in a Combined Indoor-Outdoor Scenario, The development in technology has given us all sophistications but equal amounts of threats too. This has brought us an urge to bring a complete security system that monitors an object continuously. Consider a situation where a cargo vehicle carrying valuable material is moving in an area using GPS (an outdoor sensor) we can monitor it but the actual problem arises when its movement involves both indoor (within the industry) and outdoor because GPS has its limitations in indoor environment. Hence it is essential to have an additional sensor that would enable us a continuous monitoring /tracking without cutoff of the signal. In this paper we bring out a solution by combining Ultra wide band (UWB) with GPS sensory information which eliminates the limitations of conventional tracking methods in mixed scenario(indoor and outdoor) The same method finds application in mobile robots, monitoring a person on grounds of security, etc.

➤ GSM SIM900A

This is an ultra compact and reliable wireless module. The SIM900A is a complete Dual-band GSM/GPRS solution in a SMT module which can be embedded in the customer applications. Featuring an industry-standard interface, the SIM900A delivers GSM/GPRS 900/1800MHz performance for voice, SMS, Data, and Fax in a small form factor and with a low power consumption. With a tiny configuration of

24mmx24mmx3mm, SIM900A can fit in almost all the space requirements in user applications, especially for slim and compact demand of design.

➤ GPS Receiver

Global Positioning System (GPS) is a device that is used to calculate the geographical location of the user by knowing the latitude and longitude and also receiving the signal from the GPS satellite.. The Global Positioning System (GPS) is a global navigation satellite system (GNSS) made up of a network of a minimum of 24, but according to the

current updates there are 30 satellites placed into orbit by the U.S. Department of Defence.

➤ Live Streaming Video

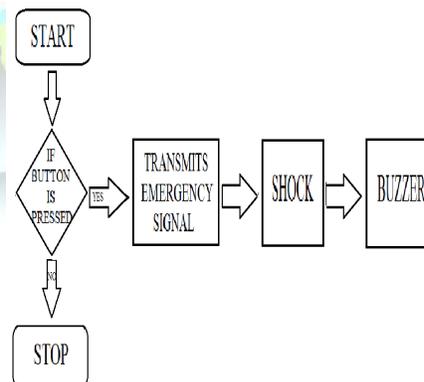
The live streaming video is a type of video loop that is sent in compressed form through the internet and is viewed by the user in real-time. Because live streaming video is adaptable to every user, so the web user's does not have to wait to download a file to play it. Instead the file is send in a continuous stream so that the user need to just play it as it arrives.

➤ Extra features

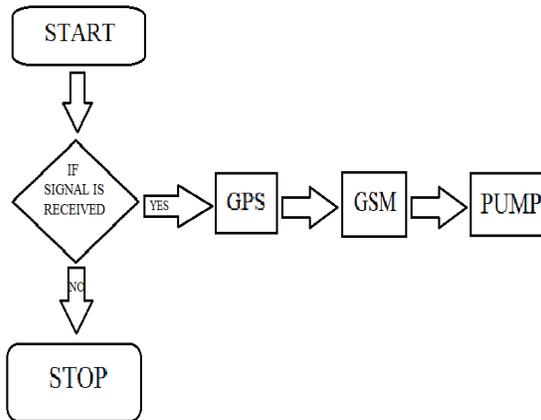
A DC 5V motor pump is used for the tear gas mechanism which is implemented on one side of the spectacles. So when a victim is attacked the tear gas is sprayed to the eyes of the attacker. For Screaming Alarm, we are using the 3V buzzer for getting the attention of the others. By using a 9V battery we are giving minute shock pulse to the attacker. All these mechanisms works when the pressure switch is pressed which is implemented in the wrist band.

VI. FLOWCHART

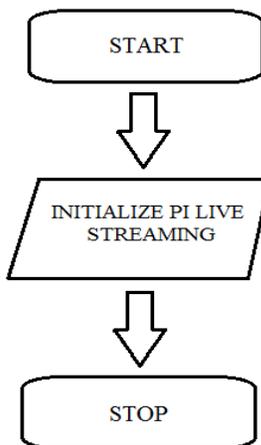
A. Transmitting Section



B. Receiving Section



C. LIVE Streaming section



VII. RESULT

When the pressure switch is pressed the buzzer turns on also a shock is given to the attacker. At the same time the motor turns on from which the tear gas is sprayed to the attackers eyes and also the camera turns on in which the live streaming is taking place, both these are kept at the spectacles. By using GPS the location of the user is traced and by using GSM an emergency message is send to the saved contacts in the SIM, the message contains the victims locations and also the link of the live streaming video.

VIII. CONCLUSION

This paper presents the design and fabrication of highly automatic security system for women. Women all over the world are facing much more harassments and violence. So to protect their life from these attackers are now becomes as a responsibility of our society. Through this work we put hands forward and made two devices called a wrist band and a spectacle which can be used as the security system for women. The pressure switch in the band automatically receives input and makes the buzzer turned on. There by the location and messages are send to the selected persons in the contacts and also the live streaming video helps to track the persons face. The tear gas mechanism in the spectacle which make the attacker disturbed and there by women can escaped from the situation.

IX. REFERENCE

- [1] SMART INTELLIGENT SECURITY SYSTEM FOR WOMEN ,GeethaPratyushaMiryala B. Tech, Department of ECE D.M.S.S.V.H College of Engineering, Machilipatnam, Andhra Pradesh, India P.V.V.N.D.P Sunil Assistant Professor in E.C.E Department D.M.S.S.V.H College of Engineering, Machilipatnam, Andhra Pradesh, India
- [2] Smart Electronic System for Women Safety S Shambhavi1, M Nagarajal, M.Z Kurian1 Department of Electronics and Communication, Sri Siddhartha Institute of Technology, Tumakuru, India1.
- [3] SMART GIRLS SECURITY SYSTEM Prof. Basavaraj Chougula1, Archana Naik2, Monika Monu3, Priya Patil4 and Priyanka Das5
- [4] Rathmell, a. (2009), "Security and Justice development – what next?", *Journal of Security Sector Management*, Vol. 7, p no. 2.
- [5] Beth Woroniuk, "Women's Empowerment in the context of Human Security", Bangkok, Thailand, December 7-8-1999.
- [6] Charlotte Bunch and Roxanna Carillo, "Global Violence against Women: The Challenge to Human Rights and Development" in Michael Klare and YogeshChandrani (eds.), *World Security: Challenges for a New Century*, third edition (New York: St. Martin's Press, 1998), p. 230.
- [7] Christo Ananth, S.Silvia Rachel, E.Edinda Christy, K.Mala, "Probabilistic Framework for the Positioning Of



*a Vehicle in a Combined Indoor-Outdoor Scenario”,
International Journal of Advanced Research in
Management, Architecture, Technology and Engineering
(IJARMATE), Volume 2, Special Issue 13, March 2016,
pp: 46-59*

[8] Susan McKay, “Gender Justice and Reconciliation,”
Women’s Studies International Forum, vol.23, no. 5,
2000.

