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CHILD AND WOMEN SAFETY DEVICES BY RSS TECHNOLOGY

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Abstract--*The main aim of the project is to save the child from threads. Day by day the safety measurement of children has been reduced due to busy schedule of parents. violence against children has been in increased. This problem arises not only for child but also women's . By taking the single step forward to save the child. This project is mainly focus on sensing children movement, and monitoring the child by Received signal strength (RSS) here instead of GPS we are RSS Received signal strength. Through RSS child has been monitoring continuously. If child reaches to critical state the system notifies the location to parents. It has a MEMS micro electro mechanical system sensor. The key application of RSS is easy, low cost. RSS Involves localization process across wireless networks(WSNS).RSS is more practical indoor localization background. This act as wearable device. Now a days most wearable devices available in market and it is used for security purpose. Some of the wearable devices requires smart phones to operate but every one doesn't ability to maintain smart phone the device replace.*

Keywords--*children , RSS , MEMS , wearable , safety*

I INTRODUCTION

Large number of children going school everyday . Parents are always thinking about their child safety. The main aspect of the paper is to save the child from risk .Recent days most of the child getting loosed in major crowed areas as well as indoor locations .RSS helps to parents to find the location of children and monitor them .The proposed system helps to track and guide .RSS sources are estimate to find the indoor localization environment and target the nodes. We are implementing RSS technology for wearable devices. RSS offered evidence of the new system's efficacy and dominance relative to trendy position techniques. Each and every day young children were missed. Many crimes against children. crime rating is exploring everyday due to lack of safety measures. For using safety wearable devices people were thing about cost of the devices. This project provides wearable devices with low cost .This is due to technology use in the project is RSS. Location of users in RSS is a crucial concept which has been extensively discussed in literature.

II RELATED WORK

I The focus of the paper is to monitoring the child and forwarding SMS content from child location to parent as nature for the RSS . Transmitting the signal from base nodes to target nodes. Base nodes also called as Anchor nodes. An RSS system that provides security to child. Arduino Uno micro controller board is used for SOS representation. Additional modules which will provide to current status of user [1].

Selma and Prasanta (2018) claim the unit is less stable in today's world girls field and has many issues about their protection intent. This paper describes the safe and stable women's electronic network that includes an

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Arduino controller and sensors such as LM35 temperature, flex sensing unit, MEMS measuring tool, heart rate sensing item, sound sensing unit. For this project a buzzer, Led, GSM and GPS area device included. When the girl is in risk, the system detects parameters of the body such as pulse intensity, temperature change, patient activity by flex sensing unit, MEMS measurement device and even the victim's voice are sensed by sound sensing item. When the sensing feature crosses the edge limit the system is triggered and the target abuse condition is tracked using the GPS module. The victim's location is transmitted to the recorded touch variety through manipulation of the GSM module [2].

For today's environment, protection is that with a private this project the network consists of a computer, which is triggered until the screen is turned on then a text message is provided from emergency contacts along with a voice warning call. More the one who receives the alerts will know and monitor the position while not communicating with the victim's question at all, and each will work [3]

The present foreign scenario, the prime topic in the minds of each women, is increasingly concerned with her health and protection given the ever-increasing increase in girls' abuse concerns in the recent past. In this paper they propose to possess a method which is the combination of several tools, hardware involves a watch, "smart band" which interacts continuously with critical phone which has access to the net. The system is designed and filled with all the knowledge needed and has human behaviour and responses to very different issues such as frustration, fear and anxiety. This produces a transmitted signal to the responsive machine. The automated framework or device has analyzed GPS and electronic communications systems that are reprogrammed in such a way that when it detects an emergency alert, it can submit queries to the closest station house, family, and all the citizens inside the local UN agency area, along with the location coordinates. This intervention helps the police to make things immediately safer for the public to locate the suspect with reasonable precision inside the local UN department [4].

Associate in Nursing program that provides all the distinctive solutions such as monitoring time position and combining many of the technologies provided by the predominant framework such as GPS pursuit, SOS. The equipment requires Participate in the original nursing register along with emergency contacts, and the patient is often required to check from time to time the emergency contacts. As the user moves from one place to another, the complex GPS chase provided by the Pub Nub channel is enabled to display the position of the user on a map. With this feature, users with a constant device can track alternate users via the complex GPS chase program through the Pub Nub channel. If the SOS has been ironed, the Associate in Nursing warning message containing the user's name will be transmitted via SMS. The consumer also obtained first aid telephone services and toll free helpline services. All the knowledge and details are incorporated into the foundation [5].

Describes safety device for girls, a wearable sensible bracelet, that sends alerts to friends, family, also because of the police once they fell they're in drawback. The sensible device supported IOT uses a low-energy Bluetooth association to synchronize to Associate in Nursing application on the wearer's Smartphone. The appliance lets the user inform her situation just in case of an important scenario - to her friends, relations, the police, or a group. The automated framework or device has analyzed GPS / GSM and electronic communications systems, which are reprogrammed in such a way that, after detecting an emergency alert, it will send queries to the nearest station house, associated emergency operating keys (SOS), along with the location coordinates. This action permits

facilitate in a flash from the Police UN agency is within the close to geographical location, UN agency will reach the victim with nice accuracy. The app additionally uses the Smartphone's record the incident and afterwards transmits the wearer's location [6].

RSS references to clarify node goal location in the wireless indoor network climate. The description of the proposed theory of positivity is focused on the theory of beliefs, and can be called the theory of assurance.

This theory is proposed by Dempster by the author called shafer in the year 1976.This theory is mainly about processing the information and mistakes such as opinion, unreliability, avoidance and conflict between sources. DST aims to mixture the separate the parts of information that come from different sources and DST make into one frame of node. This process is known as frame judgement. DST theory can be taken as generalization. In that information is changed by the believability, possibility function which corresponds large and small parts of probabilities. DST accepts hypothesis theorm instead of singleton hypothesis. When it does not sufficient DST provides mass of two parts of hypothesis not to each of the single ton hypothesis[7].

Communication models also refers propagation models, radio propagation is default indoor, a low probability and availability of line sight.[8]

Line of sight: The Features and electromagnetic waves can travel direct from transmitter to receiver in straight line. This configuration relationship of RSS and nodes with two sections such that the gap with indoor nodes can be taken by log-distance-path-loss, two configuration for ray propagation. LDPL may establish free space between the transmitter node and the receiver node primarily used in RF-communication. Generated signal power is the inverse of the distance to the transmitter rectangle. TRP model is created from LDPL model due to the opposite signal. LDPL model is simple compare to TRP model. There are the parameters involve during signal transmission[8]

RSS based signal tracking is distance from the base propagation models to target models. This model consist of four categories: Accessibility techniques, graphic techniques ,biometric techniques, other techniques[9].

1. ***Accessibility techniques: -***

This technology estimates the distance from target node position closeness to known reference points. This techniques is used for identification of Rf , wifi networks, blue tooth low energy technology. Validity depends largely on the intensity and the reference point distribution [9].

2. Graphic techniques: -

Graphical strategies comprise of goal node location by providing details between pairs of sensors. Geographic techniques helps to improve position of the nodes by applying fuzzy logic. Weighted centroid localization is an example of geographic techniques[9].

3. Biometric techniques: -

Standard deviation in biometrics of RSS measurements at single sample location. The mass for RSS calculations and the transmitter node and receiver node likelihood [9].

The child tacking safety wearable device provides parents with real time location along with Sensors to sense and UV radiation index and alarm for alert by standards .the child safety wearable devices are more compatible by using modules such as lily pad Arduino which sends into fabric and it give more power to battery[10].

These days many issues arise in society against women .most of the women being raped due to lack of security.to resolve the issue we are propose wearable device with tracking devices like GPS,RSS. The safety measures wearable device for women's can be used by three ways. They are voice, switch and shock. The device consist of alarm that alters in case the women in trouble. THIS device is in active state when the women is walking alone in the road any remote area. At that time only women authenticated to on the device start by fingerprint[11].

Technological development makes to create new electronic gargets that gives knowledge along with it give's safety. Wearable devices with tracking system to children and women that comes with many benefit's. They are many GPS devices which has their own pros and cons it all depends on usage of the device. some are expensive to use some easy to use.TO Diminish the cost of device.by using technology make things easier. PS Is Expensive to use we are Replacing GPS with RSS [12].

Planned, a kids following system supported automaton terminals. Recently, everywhere the planet crime against the youngsters at intervals the age of fourteen to seventeen years might be a heap of traditional. Parents are often concerned about their children while they are out of the home. Throughout this article, the scheduled program comprises of two hands, one of which is the parent module and the other is the kid module. The children's module consists of ARM7microcontroller (LPC 2148), GPS (Global Positioning System), GSM (Global Mobile Communication System) and speech chip while the parent module comprises of a transportable automaton. This paper provides the awareness about lost children from the perspective about teachers. Every module is secured by 2 automated cell phones. The device that guides the child from distributing to destination i.e. From home to graduate, or anywhere else.[13]

Designed a security device. The primary aim of this study is to build a wearable IOT system for defending and shielding children, women kids typically do so by analyzing physiological signals in conjunction with body movements. The signs ar analysed and temperature is measured by galvanic skin resistance. This work deals with temperature and stress and skin resistance and relationship between them. By applying the records, activities and persons position is analysed. The device makes associate analysis of skin resistance and temperature to analyse matters of the person.[14] [21].

A versatile girls 'and ladies' arm band for comfort and security. The study of the physiological signal in combination with the location of the body achieves this purpose. The physiological signals that analysed rate detector, vibration detector and if there's any fault it else uses a fault detection detector. Acquisition of data makes the Arduino controller operate by activating the GPS to send alert messages via GSM else the} wireless camera captures photos and videos and sends photos to the pre-decided contacts and jointly shares video line to the family contact.[15]

The women and kid safety is additionally a necessary issue as a results of This paper proposes to trace the ladies or kid from dangerous state of affairs. The flex detector band wears by the kid or a girl. If they're in dangerous state of affairs they're going to bend the flex detector near to, then it's planning to send the correct location to the automaton phone by The GPS and GSM module that is already connected to the ARDUINO UNO.[16]

The scope of their system is to develop a sensible device which might facilitate ladies in some emergency things. The system may be a sensible wearable device that resembles a jacket. The device contains completely

different modules like GPS (Global Positioning System), GSM (Global System for Mobile communication), Camera, Buzzer, Shock Mechanism Circuit. the most objective of the system is to produce a reliable security system for a lady after they area unit alone or feel unsafe[17].

"Smart Bear" that may be a hypothetic connected-smart toy for youngsters. Although the versatility of the area unit is appealing to growing youth and their elderly, the privacy issues posed by the area unit should be taken into careful consideration. A giant amount of kid's non-public information (and in all probability of alternate uneducated juveniles and adults in physical vicinity) area unit is assessed and evaluated, AN appropriate child profile is rendered and advertisement tactics are more likely to emerge. The product could unexpectedly turn out to be a tool for criminal enforcement, whilst sinister third parties can compromise the tool and lead to actions that may also endanger the physical and/or psychological health of the kid.

Knowledge reduction and privacy enhancement technology area unit recommended, which would, if not completely mitigate, reduce the risks provided. Cybersecurity initiatives represent a required condition for privacy issues to be mitigated. This paper concludes that while a zero "Smart Bear" Privacy Risk is currently unachievable, a "Smart Bear" Privacy Concern is not that difficult to achieve. [18] [22].

When a woman or child carrying this 'watch me' is exposed to sexual or helpless assault, the gift sensing factor in it senses an individual's guts beat rate that can be high instantly by secreting internal endocrine secretion from the hap axis and triggers it. This can not only give alarm sound to close people, it will make a mechanical decision for our registered contact and also find the nearest station via GPS / GSM [19]

A program that makes hunting help for ladies and kids in any critical scenario easier. To this end, the device includes GPS to see position and GSM mechanisms for transferring their current location to any of the safe contacts as a google map connection and services provided to track locations from that moment on to save lots of people.[20]

(a) (b)

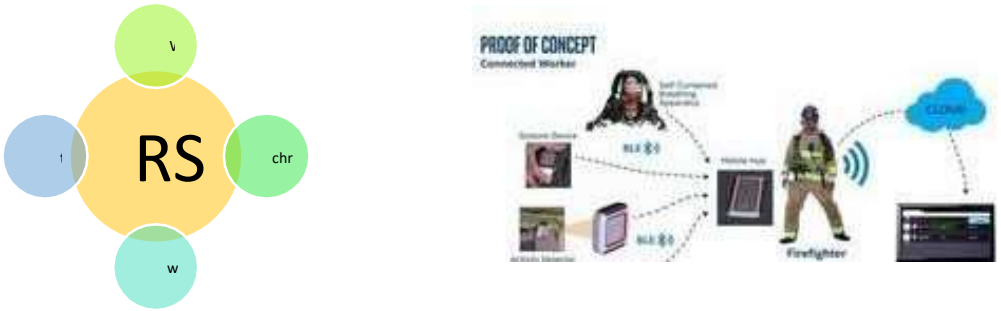

Figure 1: (a)RSS CONNECTIONS, (b)WEARABLE DEVICES

III PROPOSED APPROACH

This Project shows Implementation of safety devices for child and women focuses on location by using (RSS)Received signal strength instead of GPS .RSS simple and low cost. By using RSS Technology can focuses the base Station to target node position. This project also supports to monitoring the child and Women. It can Extended by sound recognition by sensors. RSS helps to send information to user.

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IV CONCLUSION

This paper is all about the prevalent girls security applications associated with an ambitious girls safety and protection program and further research is feasible by incorporating good technology wherever people and objects form a network. This will promote their technical resolution by means of portable instruments and concepts. Victimization screaming alarms and alerting them collectively by triggering the messages to the situation is useful for women's health. This approach will resolve the fear within the country that scares every lady about her safety and security.

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