SAFETY GAGET FOR CHILD MONITORING AND NOTIFICATION

LITERATURE SURVEY

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***M NANDHINI PRIYANKA, S MURUGAN, K N H SRINIVAS, T D S SARVESHWARARAO, E KUSUMA KUMARI*** on  **SAFETY** ***SMART IOT DEVICE FOR CHILD AND TRACKING*:** : Child safety and tracking is a major concern as the more number of crimes on children are reported nowadays. With this motivation, a smart IoT device for child safety and tracking is developed to help the parents to locate and monitor their children. The system is developed using LinkIt ONE board programmed in embedded C and interfaced with temperature, heartbeat, touch sensors and also GPS, GSM & digital camera modules. The novelty of the work is that the system automatically alerts the parent/caretaker by sending SMS, when immediate attention is required for the child during emergency. The parameters such as touch, temperature &heartbeat of the child are used for parametric analysis and results are plotted for the same. The above system ensures the safety and tracking of children.

***AkashMoodbidri, Hamid Shahnasser*** on ***Child safety wearable device’****, International Journal for Research in Applied Science & Engineering Technology* : In today’s world child and women are less secure and have many issues regarding their security purpose. They have to undergo among various difficult situations and have to prove themselves every time in all critical conditions. So, for their security and safety purpose government has provided security through rules and regulation to the society. Although there are many existing systems for security purpose need of advanced smart security system is increased. In order to overcome such problems smart security system for child and women is implemented. This paper describes about safe and secured electronic system for child which comprises of an Arduino controller and sensors such as temperature LM35, flex sensor, MEMS accelerometer, pulse rate sensor, sound sensor. A buzzer, LCD, GSM and GPS are used in this project. When the child is in threat, and the offender hand touches the touch sensor which is fixed in the bad touching places of a girl child, the device senses the body parameters like heartbeat rate, change in temperature, the movement of victim by flex sensor, MEMS accelerometer and the voice of the victim is sensed by sound sensor. When the sensor crosses the threshold limit the device gets activated and traces the location of the victim using the GPS module. By using the GSM module, the victim’s location is sent to the registered contact number.

**Nitishree**, on ‘**A Review on IOT Based Smart GPS Device for Child and Women Safety’***, International Journal of Engineering Research and General Science*: This paper is based on IOT (Internet of Things). As we know in present era everything is based on digital technology. Nowadays every person is connected with each other by many ways,where most popular communication is internet so it is internet which connects people. This paper proposes an Android based solution to aid parents to track their children in rea ltime. Different devices are connected with a single device through channels of internet. The concerned device is connected to server via internet.The device can be used by parents to track their children in real time or for women safety. The proposed solution takes the advantage of the location services provided by GSM. It allows the parents to get their child‘s location on real time by SMS. Here,a prototype model (device) is created which is simulation based. The work comprises ARM-7 LPC2148 as microcontroller, along with GPS and GSM module. Embedded C core compile using Keil and virtual simulation check using Proteus 8.1 is done.A server is created which will collect all the data generated by our prototype system and send the same to server using GPRS. A Dummy server will be created by using Filezilla. This device will also have the facility of Emergency help key (SOS), if anyone presses the key , automatic help message will be sent to 3 registered mobile numbers on Server.

**AnandJatti, MadhviKannan, Alisha,RMVijayalakshmi, P ShresthaSinha** on ‘**Design and Development of an IoT based wearable device for the Safety and Security of women and girl children’** *IEEE International Conference On Recent Trends In Electronics Information Communication Technology*: The aim of this work is to develop a wearable device for the safety and protection of women and girls. This objective is achieved by the analysis of physiological signals in conjunction with body position. The physiological signals that are analyzed are galvanic skin resistance and body temperature. Body position is determined by acquiring raw accelerometer data from a triple axis accelerometer. Acquisition of raw data is then followed by activity recognition which is a process of employing a specialized machine learning algorithm. Real-time monitoring of data is achieved by wirelessly sending sensor data to an open source Cloud Platform. Analysis of the data is done on MATLAB simultaneously. This device is programmed to continuously monitor the subject's parameters and take action when any dangerous situation presents itself. It does so by detecting the change in the monitored signals, following which appropriate action is taken by means of sending notifications/alerts to designated individuals.

**SeungHee Lee, JaheeSohn, Atsushi Usami,** and **Masatoshi Hamanaka** on ‘**Development of Wearable Device by Kid’s Friendly Design for Kid’s Safety**’ *International Federation for Information Processing:* In this study, we develop a wearable device for kids under 6 years who are growing up so fast physically enough to face various experiences but low ability to describe the events by language exactly what they have experienced at nursery or kindergartens to share with their parents. This system will be linked with local safety network to let somebody react real time when a kid faced to any inexperienced events. We adapt biological information such as heart rates, physical information such as body movements, GPS and camera on the device. The data from the device could be shared to parents or teachers in the kindergarten afterwards or real time. We focus on designing the device has fascinated form giving, ease to wear and symbolic indication of “Protected” by wearing on. To keep kids enjoy wearing the device as like a pendant. In this paper, we introduce the user oriented development of the device which has kid’s friendly design and useful function.