V.S.B.ENGINEERING COLLEGE, KARUR

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LITERATURE SUYVEY

TITLE : SAFETY GADGET FOR CHILD SAFETY MONITORING & NOTIFICATION

DOMAIN NAME : INTERNET OF THINGS

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ABSTRACT :

IOT is getting upgraded day by day simultaneously its security is also upgraded. In this proposed system, they are mainly focusing on child remote monitoring system also they are using the radar devices as well as obstacle sensors which will detect the alert when the child enters the danger zone or else he/she is approaching towards harmful object then alert will be given to the caretaker through the mobile using an alarm or notification. For sensing purpose they are using Waterproof Ultrasonic Obstacle Sensor which are placed in the simple locket that is given to the baby so that locket will give alert to the caretaker through the mobile and for battery backup they are using solar panel through which the energy will get stored in the care taker's shoes and this energy will be dependent on the steps covered by the care taker. In this proposed system a general method for rapid peak detection is used for depth/height measurement. First, the signals curve is equal divided and maximum and minima values in each segmentation are collected. The repeated maximum and minima values are removed and all fake peaks are merged in the case of ensuring true peaks remained. Experimental results showed that: compared with traditional methods, the proposed method is more accurate and faster in peak detection, and suitable for a variety of waveforms.

INTRODUCTION :

Among the enormous applications enabled by the IOT(Internet of Things), smart and secure monitoring system is a particularly important one. IOT is getting upgrading day by day simultaneously its security is also important. As IOT is the vast concept it includes many types of subtopics in which they are working on the small project named as "Smart and Secure IOT Based Child Monitoring System". Main motive of this project is to solve the problems of baby guardian and also secure the baby from entering the danger zone. As soon as the baby enters the danger zone the guardian will be notified through the various methods either by SMS system or via the warning

buzzers. Warning buzzers are also bifurcated in three types according to the danger faced by the baby. Warning buzzers are also of different colored LED's. When the baby is near the danger zone it will alert the guardian by blinking with red LED and if the baby is far away from the danger zone then yellow LED will blink similarly when baby is in intermediate of the danger zone green LED will specify the guardian. This project includes radar sensors, Wi-Fi module, image processing, temperature sensors and display device. For operating purpose they are connecting our device to the baby and alerts as well as notifications will be given to the guardians display device.

LITEREATURE SURVEY :

The Author describes [1] Safety of a child in a large public event is a major concern for event organizers and parents. This paper addresses this important concern and proposes an architecture model of the IoT-enable smart child safety tracking digital system. This IoT-enabled digital system architecture integrates the Cloud, Mobile and GPS technology to precisely locate the geographical location of a child on an event map. The proposed architecture model describes the people, information, process, and technology architecture elements, and their relationships for the complex IoT-enable smart child safety tracking digital system. The proposed architecture model can be used as a reference or guide to assist in the safe architecture driven development of the various child tracking digital systems for different public events.

The Author describes [2] This paper is mainly streamed towards child safety solutions by developing a gadget which can be tracked via its GPS locations and also a panic button on gadget is provided to alert the parent via GSM module calling for help. Parental android app is developed to manage and track the device anytime. Smart gadget device is always connected to parental phone which can receive and make phone calls and also receive SMS on gadget via GSM module, also a wireless technology is implemented on device which is useful to bound the device within a region of monitoring range, if device is moving out of monitoring range then an alert will be triggered on binding gadget, this helps you keep a virtual eye on child. Health monitoring system on gadget checking for parameters like heart beat/pulse rate and temperature is included which can be monitored on parental app. Gadget also monitors whether it is plugged on hand or not using contact switch and alert the parent as soon as it is unplugged.

The Author describes [3] Child security is the foremost common issue emerging around the world. There are numerous issues to youngster security and this work primarily manages kid security from the dangers like missing, abducts. The Technical point of this task is to have an ordinary correspondence between the kid and parent through the gadget which helps in finding the area, pulse and temperature of the kid utilizing the gadget empowered with the pulse sensor, temperature sensor and GPS tracker. This gadget empowers association between the youngster and parent through the WIFI module cooperation utilizing IoT. The parent can get to the kid data intermittently by interfacing through this gadget. This makes guardians defend youngsters even in their nonattendance. The data is stored into a cloud permanently to keep the track record of old data of the children for further reference. The sensors are activated automatically when they are subjective to the miscellaneous activities.

REFERENCES :

[1] Badgujar, Dipali, Neha Sawant, and Dnyaneshwar Kundande. "Smart and secure IoT based child monitoring system." *Int Res J Eng Technol (IRJET)* 6.11 (2019).

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[2] Manjunatha, N., et al. "IoT Based Smart Gadget for Child Safety and Tracking."

[3] Ranjeeth, Bannuru, et al. "Smart child safety wearable device." *2020 International Conference on Electronics and Sustainable Communication Systems (ICESC)*. IEEE, 2020.