LITERATURE SURVEY

IOT Based Safety Gadget For Child Safety Monitering

Date	08.11.2022
Team ID	PNT2022TMID08341
Project Name	Project - IOT based safety gadget for child safety monitoring and notification
Maximum Marks	4 Marks

1. Smart IOT Device for Child Safety and Tracking

Name of Author: M Nandini Priyanka, S Murugan, K N H Srinivas,

T D S Sarveswararao,E Kumari.

Published By: Blue Eyes Intelligence Engineering & Sciences Publication

Objective:

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 Link It 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.

2. Smart and Secure IoT based Child Monitoring System

Name of Author: Dipali Badgujar, Neha Sawant,

Prof. Dnyaneshwar Kundande

Published By: INTERNATIONAL RESEARCH JOURNAL OF ENGINEERING AND TECHNOLOGY (IRJET)

Objective:

In this focusing on child remote monitoring system also we 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 we 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 we 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.

3.IoT-based Child Security Monitoring System Author: Lai Yi Heng1,Intan Farahana Binti Kamsin2

Objective:

Online questionnaire and semi-structured interview are methodologies used to collect data. The online questionnaire gains feedbacks by sending questions electronically, where answers need to be submitted online. In the semi structured interview, researcher meets and asks respondents some predetermined questions while other being asked are not planned in advanced. Through information obtained, a smart band have been proposed to monitor the safety of children. By this, parents know what is happening remotely and can take actions if something goes wrong.The future improvements of this device will be adding functions and software to make it works like a phone such as messaging, gallery, Google, YouTube, meanwhile, adding more child security features so that child safety is guaranteed.

4.A Prototype of Automated Child Monitoring System using Raspberry Pi

Author: Prof. S. Sundar,Rohan Ghosh and Harris Shahil

Published By: International Journal of Computational Intelligence Research

ISSN 0973-1873 Volume 13, Number 7 (2017), pp. 1593-1603© Research India Publications http://www.ripublication.com

Objective:

Using Raspberry Pi Microcomputer and a camera, which is made dynamic using Passive Infrared (PIR) sensors and Servo motor. The camera will rotate according to the Movement of the child around the room it covers. The camera will be installed In the centre of the room so that it can cover all directions .The video captured Can be streamed live online and parents can access the feed by logging in to a Website. A GSM module has been used, so that the parents can get SMS alert Whenever any sensor is activated. The proposed setup is a low cost Surveillance system and can be implemented at home or childcare facilities.Using Raspberry Pi microcomputer and a camera, which is made dynamic using Passive Infrared (PIR) sensors and Servo motor. The camera will rotate according to the movement of the child around the room it covers. The camera will be installed in the centre of the room so that it can cover all directions .The video captured can be streamed live online and parents can access the feed by logging in to a website. A GSM module has been used, so that the parents can get SMS alert whenever any sensor is activated. The proposed setup is a low cost surveillance system and can be implemented at home or childcare facilities.

5.Child Safety Monitoring System Based on IoT

Author:N. Senthamilarasi, N.Divya Bharathi, D.Ezhilarasi, R.B.Sangavi

Published By: International Conference on Physics and Photonics Processes in Nano Sciences Journal of Physics: Conference Series 1362 (2019) 012012 IOP Publishing doi:10.1088/1742-6596/1362/1/012012

Objective:

Temperature sensor which is used to detect the temperature of the Child as well as the surrounding temperature. If there occurs any abnormal rise or fall in temperature in The body of the child or in the surrounding it will notify the user as per the coded time delay as shown In the picture. It will

show the temperature and humidity values notifies the user based on the Predefined value abnormal fall or rise scenarios.