1.IoT-based Child Security Monitoring System

(Lai Yi Heng , Intan Farahana Binti Kamsin)

Publication : International Journal of Innovative Technology and Exploring Engineering (IJITEE**)**
Year : 8 June, 2019

Nowadays , crime rate are increased in the world . Due to this , People's attention are mostly concerning child's safety . In this module , they conducted to propose a child security smart band utilization IoT technology. The devices interconnected with real world sensor and actuators to the internet . By using sensor , it makes decision via discover something that is different to see in surroundings environment with or without human help. Internet of Things (IoT) is applied to initialize a wearable smart band which is very useful to parents to monitor and if they want child's condition , they will know it anytime and anywhere via smart band. In this smart band , they enabled child's live location and capturing data remotely like temperature , pulse , respiratory rate and also it shows the children's quality of sleep. Its shows the parents with child actual data with reference value . And also it sends notification to their parents if the children are gone out from a particular location which they locked and it notify the parents to realize abnormal condition / Situation. The major thing is when the child presses the emergency button the devices automatically enables the video recording along with real time video will be sent to parents mobile apps.The prototype of IoT wearable smart band connected with trustable parents / guardian mobile apps. By the help of this wearable smart band they can monitor the actual of children and anytime and anywhere

2.Low Cost Intelligent Child Safety Wearable IoT Device for India

(Firoz Khan, Yashas S, Shivangowda R Patil)

Publication : International Journal of Recent Technology and Engineering (IJRTE)

Year : May 2020

In current scenario , the larger issue is child security . We want to safeguard not only children but also women from threats. So they developed the smart wearable devices at low cost which comfortable to buy it by common people. By the help of this we can track real time location of the children and women in which who are in emergency situation. This project presents mobile applications where they used XML , JAVA for code. The main goal of the device is to notify the parents by sending SMS as well as it was automatically switch on real time voice form the children/women when the child or women moves out of the boundary . Most of the devices using Wi-Fi and Bluetooth for their security purpose, but this module describes the system which consist of an MPU 6050 gyroscope ,node MCU Microcontroller and other sensor , GPU receiver for smart and safe at low-cost usage. This module contains attributes of high reliability , efficiency , short response time , high accuracy .The comfortable thing is the wearable smart band is customization but reprogramming the system as per our requirements. GPU module consist the location by analyzing the signal that receive by GPS satellites with the help of Geo Fencing defense. When the child or in abnormal or in emergency situation , they used to press the button that will intimate the message to registered phone number with link of capturing image and it has great option that speed monitoring using GPS , GPRS ,and GSM for child safety at low cost which will comfortable to common people.

3. Survey on Child Safety Wearable Device Using IOT and Cloud Computing

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Year : February – 2020

Child Safety is major concern in all over the world due to inability to resist a hazard of children with the issue. They Implemented Wearable (IOT) Sensor network for monitoring the environment of the children. It included the mechanism for Tracking the child. An advantage of using it is accessed from any mobile devices and easy to access it, not much more knowledge needed to operate this devices. The basic mechanism of the device is to monitoring the child's environment through sensor nodes, updating real time data to cloud server. The data can be accessed by parents/guardians by using web-based Interfaces on cloud server and also sent alert through mobile application in emergency situation to their parents/guardians. The devices are very easy to interact between the child and parents/guardian. The Child's Location is Tracked using GSM to locate in real time. The Work is Constructed Utilizing LinKIT ONE Board that encoded using C language and it Interface with Several Sensors Like camera , GSM and GPS . It can Sending SMS when the Child are in Emergency situation . It have option of childguard System that tracks abnormal Situations in real-time using Mobile Server. It also notify the parents, that Abnormal situation founded. It Consist of Light-weight , Configurable , Smaller and Low force utilization gadget to ecological conditions. It also provides SOS light and alarm. It will helps in easy way manner to tracking their locations. This Devices are highly Secure the Safety of Child that go missing in Crowded areas.

4. Smart and Secure IoT Based Child Monitoring System

Publication : International Research Journal Of Engineering And Technology(IRJET)

Year : Nov 2019

Internet of Things (IoT) is getting improved day to day Process to enchance its security. In this Module, they used Radar devices with obstacle sensor which used to detect gave alert to parents when the child enter the danger zone or across the boundary towards harmful object. Then the alert will be given to parents using mobile notification. Research team use Water proof Ultrasonic obstacle Sensor for Sensing and it placed in simple locket and the locket gives alert or Notification to parents (or) caretakers through mobile. For battery backup they using solar panel that fixed in shoes. It is Portable device that when the parent(or)caretaker away from child , they have to fix the device in child's wear . By this Integrated system a method which is used to rapid peak detection in depth/height measurement. The Signals by the Sensors are collected by the devices. If it repeatedly bought the signals it can alert the parents by sending notification. This Project include Radar Sensor , wifi module , Image processing , temperature sensor and display device. By this method , We avoid the all the Fake peaks that ensuring all true peaks remainds. They Compared with traditional methods , but they implemented method is more accurate and faster in peak in situation detection and suitable for variety of climates.

It will notify the alerts as well as notification will sending to the Parents/guardians display device.

5.Smart IoT Device for Child Safety and Tracking

(M Nandini Priyanka, S Murugan, K N H Srinivas)

Publication : International Journal of Innovative Technology and Exploring Engineering (IJITEE)

Year :2019

Internet Of Things (IOT) will plays important role in current and upcoming day-to-day life. With the help of Smart IoT devices, child safety and tracking is to help the parents to locate and monitor their children. Nowadays , schools and working places need high surveillance for ensuring the safety to children and women . Maximum of people using mobile phones and its plays a major role for ensuring the safety where some mobile based application. This system is developed using LINK IT ONE board programmed in embedded C Interfaced with temperature ,heartbeat , touch sensor and also GPS , GSM and digital camera modules. The Unique and exciting work is that the system automatically alert the parents / caretaker by sending the SMS ,when immediate attention is required for child during emergency and an MMS indicating an image captured by serial camera is also sent. The future scope of the work is to implement the IOT devices which ensure the complete solution for child safety problems

6.Child Safety Monitoring System Based on IoT

(N.Senthamilarasi, , D.Ezhilarasi, R.B.Sangavi)

Publication : International Conference on Physics and Photonics Processes in Nano Sciences

Year :2019

Nowadays , the overall percentage of child abasement filed in the world is about 75 % . Out of this , 70 % only girls and remaining 5 % are girl children. The children missing rate is increased in the world and due to abasement , the emotional and mental stability of children are affected in the future. Most of the children can't complain about abasement. Because they can't know what is really happens at their age . To avoid children from abuse , they implemented an autonomous real time monitoring system for prevent children before being attacked . In the system , the sensors like temperature sensor , pulse rate detection sensor , Mental detection sensor , and location value from GPS are used to detect the children status . One of the major thing is the temperature sensor which is they used to detect the temperature of the children and surrounding temperature . If it detected any abnormal rise or fall in temperature in the body of the child then it will notify the parents / guardians and web camera are used to monitor the children lively when they get notified in abnormal cases . It is easy for parents to track their children which made them ensure the safety of their children and its reduces the rate of incidents of child abuse.