
LITERATURE SURVEY ON CHILD SAFETY USING IOT

ABSTRACT:

Nowadays, crime rate associated with children keeps increasing due to which draws peoples' attention regarding child safety. This research is conducted to propose a child security smart band utilizing IoT technology. 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.

INTRODUCTION:

The job of protecting kids most often falls to parents and caregivers, and it is up to them to familiarize themselves with safety risks in and around their homes and communities. Once you know the risks, you can take steps to plan for safety.

Nearly 900,000 children are reported missing each year, that's more than 3,000 a day.

- More than 400,000 children are kidnapped each year by family members.
 - More than 78,000 are abducted by non-family members.
 - Many others are runaways or pushed out of the home by parents.
 - 1 in 6 runaways will likely become a victim to human trafficking
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- In our project we are going to use sms based solution to reduced parents insecurity and schools to track children's in real time Different devices are connected with a single device. The concerned device is connected to mobile via SMS .
 - They are interfaced with temperature , heart beat , GPS, GSM & digital camera modules.
 - Enables sending a notification if the child is out of location or when the device realizes abnormal conditions/situations.

LITERATURE SURVEY:

M. Madhuri, A. Q. Gill and H. U. Khan [1]-“ The proposed integrated digital technology architecture such as the Salesforce cloud, Mobile Application and GPS can be easily used for tracking a missing child in an event. This work is a first steps towards the development of a working software for a Smart Child Tracker ”

A. Srinivasan, S. Abirami, N. Divya, R. Akshya and B. S. Sreeja [2]-“ This paper has focused mainly on the autonomous operation of the safety system. Combined usage of three different vitals has increased the accuracy of detecting the abnormal situation. Usage of machine learning has improved the accuracy and made the system intelligent”

B. Ranjeeth, B. S. Reddy, Y. M. K. Reddy, S. Suchitra and B. Pavithra, [3]-“ This IoT based device brings a revolutionary change in the current problems regarding child safety issues. Child safety is the most common problem in the world. By this project, the child missing and kidnap issues can be brought down and help the society”.

M. Benisha et al., [4]-“ The planned mechanism provides a better methodology to view & track the location of the children in terms of latitude and longitude which can additionally track using Google maps It is used by the Arduino module to overcome GSM by using IT to better Communication and heartbeat sensor and MEMS accelerator is also added. If an accident happens, message with location sends instantly to the registered contacts and also to the nearest police stations “

REFERENCE:

[1] M. Madhuri, A. Q. Gill and H. U. Khan, "IoT-Enabled Smart Child Safety Digital System Architecture," *2020 IEEE 14th International Conference on Semantic Computing (ICSC)*, 2020, pp. 166-169, doi: 10.1109/ICSC.2020.00033.

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[3] B. Ranjeeth, B. S. Reddy, Y. M. K. Reddy, S. Suchitra and B. Pavithra, "Smart Child Safety Wearable Device," *2020 International Conference on Electronics and Sustainable Communication Systems (ICESC)*, 2020, pp. 116-120, doi: 10.1109/ICESC48915.2020.9156001.

[4] M. Benisha *et al.*, "Design of Wearable Device for Child Safety," *2021 Third International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV)*, 2021, pp. 1076-1080, doi: 10.1109/ICICV50876.2021.9388592
