

LITERATURE SURVEY

1.RFID-based System for School Children Transportation Safety Enhancement :

Author: N.Senthamilarasi.

Child safety presents a system to monitor pick-up/drop-off of school children to enhance the safety of children during daily transportation from and to school. The system consists of two main units, a bus unit, and a school unit. The bus unit the system is used to detect when a child boards or leaves the bus. This information is communicated to the school unit that identifies which of the children did not board or leave the bus and issues an alert message accordingly. The system has a developed web-based database-driven application that facilitates its management and provides useful information about the children to authorized personnel. A complete prototype of the proposed system was implemented and tested to validate the system functionality. The results show that the system is promising for daily transportation safety.

2.IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING AND NOTIFICATION.

Author: Dr.Murugan

The review of literature for child safety and location tracking devices are discussed below. If the parent can send a message to the GSM module, according to the message information the GSM module replies back with particular details of the children. The location can be seen on the Google map. When a particular child is facing an emergency situation, the device button should be pressed so that the device captures the image along with the user information to the enrolled mobile numbers. The life of the child can be saved within no time. In, for the children point of view GPS, GPRS and GSM are used to monitor the speed and location tracking purpose. The system is fixed on the bus or car or in any vehicle so that whether the vehicle is going on a routine route or not can be identified by the GPS tracker, the speed of the bus can also be extracted. Now-a-days the digital technology plays a major role in connecting people via the internet. For tracking the children, the android based solution is provided to parents. The Internet is the one that will connect different components through a single device and is connected to the server. Parents track their children in real time using the location tracker by GSM and the microcontroller used is ARM-7 LPC2148. In day to day scenarios, missing child cases are increasing gradually. Child caring is a major issue. Different types of methods are introduced to find good solutions. There have been many Methods and systems implemented to solve it. In order to solve the child caring problem, a global position system (GPS) based solution with two nodes was proposed. In these two nodes, one node is a child node which contains a Bluetooth module and a GPS receiver. The parent node consists of a mobile that supports Bluetooth. The location of the child can be tracked by the GPS technology and can be displayed on the designed map in the mobile device, through the Bluetooth connection the distance between the child and parent can be calculated. Children below six years can not explain in words directly to their parents about the problems, hence a wearable device is developed . This device procures information such as heart rate, physical body movements and sends it to the parents in real time. A wearable sensor badge is constructed from (hard) electronic components, which can sense perambulatory activities for context awareness. A wearable sensor jacket is used with the latest techniques to form(soft) fabric. worn as clothing ,the sensors give the required information.

3.USING MOBILE APPS TO PROMOTE CHILDREN AND YOUTH ONLINE SAFETY.

Author: A.F. Monteiro

Regarding the use of mobile apps to promote children and youth online safety, this review identified 12 articles. Of these, 8 present studies on the development and/or use of specific apps, notably: MediaKids app [36]; FamLync ; BullyBlocker [38], [39]; Mobile Digital Etiquette Game (MDEG) [40]; SecureChild Remaining articles present reviews of existing safety apps, survey research and discuss new theoretical and methodological perspectives . Studies concerning the development and/or use of specific apps address the following issues: cyberbullying, inappropriate content online, digital etiquette, safety awareness, child tracking, participatory parental mediation to use limiting activities. In the case of cyberbullying, the applications propose to: identify instances of cyberbullying in Facebook and notify parents when they occur (BullyBlocker) provide educational training directed to young ages and focused on online etiquette (MDGE) [40]. MDGE also provides learning contents and exams on broader digital etiquette issues [45]. The MediaKids app is a reporting tool for inappropriate content conceptually based on a co-regulatory approach involving children, their families, and the education system [36]. Lazarinis and colleagues propose a tool that uses visual stories to 'teach safer internet concepts' [46] (p. 88). FamLync is a use limiting app that prompts parents and children to co-decide these limits [37]. Finally, the SecureChild app uses GPS tracking to give parents information about the child's location and time he or she arrives or leaves school [41]. Based on a review of 75 android apps (North America) whose purpose, main or secondary, is to promote adolescents online safety, Wisniewski and colleagues [43] found that parental control features are overwhelmingly present, while strategies valuing open communication or active mediation are underrepresented. These authors consider its difficult for parents to find and use these apps; the apps fail to actually protect teens from the online risks they run into; and don't meet more positive family values, namely respect for teens needs of individuality and autonomy (see also [42]), which may help explain the low levels of use of these tools [47], [48]. These authors also highlight there is no significant difference between parents' and teens' perceptions about the frequency with which these apps are used [47]. Nouwen and colleagues agree that available parental controls emphasize restrictive strategies and "fail to support families in managing digital media at home in a satisfactory way" (p.

2). For these authors, this kind of technologies should support collaboration and mutual learning, fostering parent-child interactions.

4.IOT BASED FOR CHILD SAFETY AND TRACKING:

Authors: Dheeraj Sunehera.

This paper provides an Android based solution for the parents to track their children in real time. 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 location services provided by GSM module. It allows the parents to get their child's current-location via SMS.

Merits: A child tracking system using android terminal and hoc networks.

Demerits: This device cannot be used in rural areas.

5.IOT BASED SMART GPS DEVICE FOR CHILD AND WOMEN SAFETY APPLICATION.

Author: FITSUM TESFAYE.

“Android based solution to aid parents to track their children in real time.

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.

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.”

6.GLOBALPOSITIONING SYSTEM (GPS) TECHNOLOGY.

AUTHOR: Katin Michael

“GPS is a lightweight device that attaches to the child and is designed to help parents or guardians keep track of their children and prevent this kind of tragedy. The device alleviates the stress and panic that appear when children get lost, or are difficult to reach. It emits a series of loud beeps, allowing parents to find their children quickly and easily. This is also an ideal solution for disabled adults, the elderly and daycare centers.”