Literature Survey

IoT Based Safety Gadget For Child Safety Monitoring & Notification

Jayamoorthi (Team Lead)

Jeeva (Team Member1)

Jeeva Prasanth (Team Member2)

Monickraja (Team Member 3)

S.No	Title	Abstract	Reference
1	RFID-based System for School Children Transportation Safety Enhancement	We propose 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 facilities 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	https://iopscience.iop.org/article/10.1088/1742-6596/1362/1/012012/
2	Design and Development of an IOT based wearable device for the	The aim of this project is to develop a wearable device for the safety and protection of women and girls. This objective is achieved by the analysis of physiological signals in conjunction with body position. The physiological signals	https://iopscience.iop.org/article/10.1088/1742-6596/1362/1/012012/

	Safety and Security of women and girl children	that are analyzed are galvanic skin resistance and body temperature. Body position is determined by acquiring raw accelerometer data from a triple axis accelerometer	
3	Child Safety Wearable Device	Parents need not have a smart mobile. Set of keywords are used to gain information from the kit. LOCATION keyword is used to obtain the location of the child. UV keyword is used to obtain the temperature of the surroundings. BUZZ keyword is used to turn on the buzzer which is fixed in that device. SOS is used to send a signal to the device.	https://iopscience.iop.org/article/10.1088/1742-6596/1362/1/012012/
4	Smart Intelligent System for Women and Child Security	A portable device which will have a pressure switch. As soon as an assailant is about to attack the person or when the person senses any insecurity from a stranger, he/she can then put pressure on the device by squeezing or compressing it. Instantly the pressure sensor senses this pressure and a conventional SMS, with the victim's location will be sent to their parents/guardian cell phone numbers stored in the device while purchasing it, followed by a call. If the call is unanswered for a prolonged time, a call will be redirected to the police and the same message will be sent. Additionally, if the person crosses some area which is usually not accessed by the person then a message with the real-time location is sent to the parent/guardian's phone via conventional SMS	https://iopscience.iop.org/article/10.1088/1742-6596/1362/1/012012/

Existing solution

Real-Time Child Abuse and Reporting System In the existing system, we use a voice recognition module in which the alert commands from the child are stored and kept for further reference. If the same child delivers the same command, it will compare with the alert command which was previously stored and sets an emergency level according to the alert command. The GSM has a SIM which is used to send an alert message or an alert call to the trusted peoples. GPS is used to track the live location and it is used when needed. The server will search the respective device ID from the database and search for respective contacts according to that device ID and helps in alerting the registered guardians.