

TITTLE	AUTHOR	YEAR	METHODOLOGY	FINDINGS	PROS / CONS
Child safety wearable device	Moodbidri, Akash, and Hamid Shahnasser	2017	GPS, Temperature, buzzer	This paper describe SMS text enabled communication medium between the child's wearable and the parent as the environment for GSM mobilecommunication is almost present everywhere	<p>1.The major advantage of the purpose of this device is to help parents locate their children with ease.</p> <p>1.Removing the device unit from the hand or gets damaged is prohibited</p>
ChildGuard: A child-safety monitoring system	Gao, Zhigang, Hongyi Guo, YunfengXie, Yanjun Luo, Huijuan Lu, and Ke Yan	2017	Web server, satellite, application(watch, mobile ...etc)	The ChildGuard system structure and functions: (a) The system has three main parts—an application installed on guardians' mobile devices, an application installed on children's mobile devices, and a web server. (b) The two main functions are in-path safety and region safety.	<p>1.The polyline set in the minimum surrounding square that covers the child's position point CP and polylines that may have a minimum distance</p> <p>1Network issues will be occur</p>
Child safety system based on iot	D'Errico, Leonardo, Fabio Franchi, Fabio Graziosi, Claudia Rinaldi, and Francesco Tarquini	2017	RFID, GPS	The focus is on the daily route from home to school. IoT paradigm is exploited together with different localization techniques	RFID and GPS, in order to design a solution for parents willing to make certain of their child's following the main steps to school or home side effect will occur to the child
RFID BASED SCHOOL CHILDREN SECURITY SYSTEM	RHemalatha, Divakar S., D. Logesh, S. Manoj Kumar, and S. Manoj Kumar	2017	TRANSFORMER RECTIFIER PIC MICROCONTROLLER GMS MODULE RADIO-FREQUENCYIDENTIFICATION (RFID) RTC [DS-1307]	This security system endeavours the safety transportation for the school children in a daily life	<p>1.This system uses RFID for detecting the child is enter or leaves the bus along with the stopping place of the children</p> <p>1.Wearable is effectively compare to this process</p>

IoT based smart school bus monitoring and notification system	Raj, Judy Thyparampil, and Jairam Sankar	2017	Rfid, gsm	The focus is on the daily route from home to school and vice versa, assuming the use of school buses.	<p>1.RFID technology efficient tracking capabilities is tested in children's tracking and monitoring during their trip to and from school by school buses.</p> <p>1.Network issues</p>
A Smart Security for Child Safety	Soundarya, P., M. Nivetha Kumari, and J. Jayachitra	2018	RFID, GPS, GSM	This security Wearable Device will keep the child safe and also the abuse against the child will be decreased	<p>1.This application will prevent the child from harassment and kidnapping</p> <p>1.Removing the device unit from the hand or gets damaged is prohibited</p>

Smart Child Monitoring Device (S-Cmd)	Pushpendra Kumar Pateriya Dr. Parminder Singh Jitesh R U ShivamGumber	2019	PIR Sensor,Sound Sensor,Air Quality Detector Sensor,Moisture Sensor	This Product, a Smart Child Monitoring System utilizing IOT which will assist the Parents with monitoring their kid regardless of whether they are away from home and distinguish each movement of the Baby from any far off corner of the world	1.It is used to give live updates of baby 1.side effect will occur to the child
Advanced Child Tracking Monitoring System	Praveen Kumar, G	2018	wearable device and sensors	The wearable SOS button clicked it sends signal to the command centre requesting for help	1.As the system is working properly but there is some limitations like, once the kid goes out of the campus, we cannot find the kid location. If the kids interchange the device and do something then identifying is a big task 1.Auto cad will be used to simulate the area in which we will be working on, its more or less like a simulation tool which says where the kid is and send help
Activity Tracker Wrist Band for Children Monitoring using IOT	T. Bhanupriya, Dr. T. VP. Sundararajan	2018	TEMPERATURE SENSOR,HEART BEAT SENSOR,GSM	This system mainly focuses on a wireless method which will alert and communicate with secure medium and can perform the realtime monitoring of particular zone and detect the safety with efficient accuracy	1.The Activity tracker can be used for the elderly ill people, physically challenged and children in a better way fixed with real time cameras for more precision based results and realtime accuracy
Child Security Device	Alankrit, Mishra Malbika, Singh Monika, Yadav	2018	GSM and GPS	SAFE KIDS PAXIE BAND is a highly versatile wearable device, this device also measures the temperature and heartbeat of children	1.This ID-CARD based system is developed to overcome the drawback of existing wearable. 2. it primarily focuses on tracking a child's position and its location is sent to parent's mobile phone which the parents can access by clicking on the link sent via text message

Child Safety Monitoring System Based on IoT	N. Senthamilarasi	2019	Temperature sensor Pulse sensor GPS GSM Web camera Raspberry pi microprocessor	To prevent children before being attacked, an autonomous real-time monitoring system is necessary for every child out there.	1.it easy for parents to track their children and to visually monitor them on regular basis, which makes them ensure the safety of their children and reduces the rate of incidents of child abuse.
Smart Child Safety Wearable Device	Ranjeeth, Bannuru, B. Srinivasa Reddy, Y. Manoj Kumar Reddy, S. Suchitra, and B. Pavithra.	2020	GPS tracker	This task is to have an ordinary correspondence between the kid and parent through the gadget which helps in finding the area, pulse and temperature of the kid utilizing the gadget empowered with the pulse sensor, temperature sensor and GPS tracker	1.This gadget empowers association between the youngster and parent through the WIFI module cooperation utilizing IoT. 1.The sensors are activated automatically when they are subjective to the miscellaneous activities.
Wearable Child safety System	A N Jayanthi	2020	ARDUNIO UNO GPS MODULE TEMPERATURE SENSOR PULSE SENSOR LCD DISPLAY Web camera	Camera Module can be used for surveillance of the child surroundings. This gets a clearer picture of the location or place this wearable can also be incorporated on a camera module . The hardware that can be used would be aadafruit TTL serial camera or any other camera module.	1.The main idea of this wearable arrangement arises from the challenging need for child safety as there can be circumstances where child gets missing in most of the crowded areas. 1.Removing the device unit from the hand or gets damaged is prohibited
A Survey on Child Safety Wearable Device to Prevent Child Trafficking Using Arduino	Elakiya, M., and S. Radhika	2019	GPS GSM MODEM Ardunio uno	we finally prefer using SMS text enabled communication between the child's wearable and also the parent because the GSM mobile communication is nearly present everywhere	1.provides the conception of sensible wearable devices for our little ones. And to stop kid trafficking.

Multi-sensor Wearable for Child Safety	Chowdhury, Ushashi, Pranjali Chowdhury, Sourav Paul, Anwesha Sen, Partho Protim Sarkar, Shubhankur Basak, and Abari Bhattacharya	2019	SOS Light GPS MODULE TEMPERATURE SENSOR PULSE SENSOR Heart beat sensor	This paper discusses about a smart wearable device like a wristband which tracks the child from time to time to ensure their safety	1. The proposed device is cheaper to design and compatible to various platforms like android, IOS, windows etc. rather than apps. Communication in terms of bluetooth and GSM both viable. 1. side effect will occur to the child
. "Design and Implementation of a Smart System for School Children Tracking	Khutar, Dawood Zahi, Omar Hashim Yahya, and Haider Th Salim Alrikabi	2021	GSM Module	The process of discovering the child's GSM radio navigation system	1. An application that allows parents to know the whereabouts of their children and notify them with a message if the children exceed the area specified for them. 1. Accuracy is less
. "Smart School Bus Tracking: Requirements and Design of an IoT based School Bus Tracking System	Gull, Hina, Dalal Aljohar, Reem Alutaibi, Dalia Alqahtani, Muna Alarfaj, and Rahaf Alqahtani.	2021	IoT based QR code technology	The application itself will generate a fixed QR code for each student that will be placed on a card that contains the student's personal information.	1. The parents' application will display a map that shows the current bus position and it will be updated after each period, and the intervals 2. Easy to Hack and interrupt.
. "An android application of school bus tracker based on RFID technology."	Hamadto, Tarneem M., Zakaria A. Adam, and M. H. Elsayed.	2020	RFID ,GPS	Tracking of schoolchildren to ensure their safety and to eliminate the phenomenon of losing school children	1. Easy to use mechanism 2. Human error can occur.
"A Simplified and High Accuracy Algorithm of RSSI-Based Localization Zoning for Children Tracking In-Out the School Buses Using Bluetooth Low Energy Beacon."	Sakphrom, Siraporn, Korakot Suwannarat, Rina Haiges, and Krit Funsian.	2021	Internet of Things (IoT) via Bluetooth Low Energy (BLE) which is suitable for a signal strength indication (RSSI) algorithm	a high accuracy child monitoring system for locating students if they are inside or outside a school bus	1. providing a robust position-tracking system with high accuracy. 2. Highly risky without a driver or Mentor

"Designing and implementing the people tracking system in the crowded environment using mobile application for smart cities."	Alam, Tanweer, Abdirahman Ahmed Hadi, and Rayyan Qari Shahabuddin Najam.		Global Positioning System chip	Provide an instant timeline of position information that allows parents to monitor the location of their children in a crowded environment.	<ol style="list-style-type: none"> 1. Have a wearable wrist where they imprint the phone number of their parents 2. There is a risk that child will be lost or kidnapped before ever reaching for any help
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CONCLUSION

From the above Surevey, the Proposed idea stands as best among all.visualising that a IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING AND NOTIFICATION SYSTEM , using GPS and Sim800L module.The system will notfy the parent or guardian when the child crosses the fencing area. A user friendly device.