LITERATURE SURVEY ON IOT BASED CHILD SAFETY GADGET

TITLE	AUTHOR	YEAR	TECHNIQUE	Findings/Pros/ Cons
IoT-Based child security monitoring system	Lai Yi Heng	May-2021	GPS, GSM, IoT device	1.Online questionnaire and semi-structured interview are methodologies used to collect data. 2.Features like Google maps, SMS are used. 3. It provides real-time location, surrounding temperature, UV radiation index along with Alarm buzzer.

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IoT Enabled Children Safety system	Vinod Mane, Durgesh Musale, Rohan Joshi, Aditya Toney, Anand Pande	Jan-2020	GPS, GPRS, Sensors, Serial Camera, RFID	1. It uses low cost nano RFID reader and GPRS module both interfaced with Arduino. 2.In this model, if any abnormal values read by the sensor, then an SMS is sent to mobile. 3. This model uses Serial Camera to capture an image.

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IoT Based Smart school bus monitoring and notification system	Keerthana, Samyama, Ragavendra	Mar-2020	GPS, Fingerprint Sensor, Arduino, Node MCU, Android App.	1.The app is user friendly tool for parents to track the bus location. 2.The device has real time following, student identification, delays, scholar absence. 3. This system is low cost and track parameters like location, speed.

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IoT Based Smart Gadget for child safety and Tracking	Manjunatha, Jayashree, Komal, Nayana	June-2020	GPS, GSM, Sensor, Mobile Communication, Smart phone	1.Panic alert system is also used, automatic SMS alert and phone call is triggered. 2. Automatic SMS will be sent when the gadget is unplugged from hand and alert parameter is uploaded to cloud. 3. BEACON technology is used as the safety gadget moves far away from the BLE listener gadget an alert is provided.

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Smart IOT devices for child safety and tracking	Nandini Priyanka, Murugan, Srinivas, Sarveswarar-ao, Kusuma Kumari	June-2019	GPS, GSM, Serial camera, LinKit ONE board.	1.This system is developed using LinKit ONE board programmed in Embedded C. 2.This system has multiple sensors including Temperature, heartbeat, touch, GSM, GPS, digital camera.,

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Smart wearabe device based on IOT for child safety during transportation	Elsyea Adia TunggadewiEva Inaiyah Agustin, Riky Tri Yumardi.	Mar-2021	GPS, Camera, Raspberry Pi	1.It uses raspberry pi zero W controller, GNSS HMC5983 SAW LNA GPS module to determine location. 2. 5MP raspberry pi Zero Camera to capture the incident. 3. Average time to capture is 11.57 s And to share location is 0.96s 4. It has 97.5% location accuracy and 100% photo accuracy.

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IOT based smart bracelet for women security	Priya Biradar, Priyanka Kolsure, Sujata Khodaskar,Kishor	Feb-2020	Raspberry Pi, GPS, GSM, Buzzer, Pi camera	1.Raspberry pi is a low cost single board computer is interfaced with Raspberry pi camera 2. Buzzer module emits a high frequency alarm to draw attention of public.

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IOT based device for Women's security to avoid unlawful acivities	Imtiaz Hami, Shakil Ahmed, Shohag Barman, Wahiduzza-man Akanda.	Nov-2020	GPRS, GSM, Arduino Pro-Mini Controller,	1.This system contains Arduino Pro with a GSM module and can send SMS with the victim's present area to law enforcement agency and relative via GPRS. 2. It can make a call by pressing a single button. 3. It overcomes burst-transmission phenomenon.

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IOT based wrist band for Child Safety	Venkatesh, Parthiban, Santhosh Kumar, Vinoth kumar	Mar-2021	GSM, Task Analysis, GPS, Microcontrollers	1.This device contains ATmega 2560, GSM Module(SIM800), ESP-12E, Neuro Stimulator, Buzzer, Vibrating sensor. 2.In crisis cases, the neurostimulator can pass on non-lethal electrical stun to isolate. 3. Vibrating sensor will send the prop up district to be safe if the contraption gets sneaked off.

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BeSafe: IoT-based safety band	Ganesh Jambuka, Krish Shah, Riddhi Shah, Anagha Aher	Aug-2022	Firebase, Flutter, Cross-Platform App, GSM,GPS, GPRS, GeoCoding, GeoLocator	1.Bluetooth Module helps to connect hardware with software. 2. This method helps to remember the coordinates of where they pressed the push button. 3. All data will be stored in Firebase.

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IOT based smart gloves for women safety	Zahin ali, Majid Ali Khan, Omar Bin Samin, Musadaq Mansoor, Maryan Omar	Jan-2022	GSM, Presses, Electric Shock, LCD	1.This device has Arduino UNO, GPS, GSM, LCD, Pulse rate sensor, emergency button.