

## **IBM NALAIYA THIRAN**

### **LITERATURE SURVEY**

1.**Authors:** M. Benisha, Thandaiah, Prabhu R, Gowri. M, Vishali. K **Published in:** 2021 IEEE.

**Title:** Design of Wearable Devices for Child Safety

A MEMS based SMS enabled security system with GSM and GPS module along with an emergency panic button. For every 30 minutes of duration, the information is sent to the registered mobile number.

This paper proposed a model for child safety through smart phones that provides the option to track the location of their children as well as in case of emergency children is able to send a quick message and its current location via Short Message services.

**Merits:** The advantages of smart phones which offers rich features like Google maps, GPS, SMS etc.

**Demerits:** This system is unable to sense human behavior of child.

2.**Authors:** M Nandini Priyanka, S Murugan, K. N. H. Srinivas, T. D. S. Sarveswararao, E. Kusuma Kumari.

**Title:** Smart IoT Device for Child Safety and Tracking.

**Published in:** 2019 IEEE.

The system is developed using Link-It ONE board programmed in embedded C and interfaced with temperature, heartbeat, touch sensors and also GPS, GSM & digital camera modules. The novelty of the work is that the system automatically alerts the parent/caretaker by sending SMS, when immediate attention is required for the child during emergency.

**Merits:** The parameters such as touch, temperature & heartbeat of the child are used for parametric analysis and results are plotted for the same.

**Demerits:** To implement the IoT device which ensures the complete solution for child safety problems.

**3.Authors:** Akash Moodbidri, Hamid Shahnasser **Title:** Child safety wearable device.

**Published in:** 2017 IEEE.

The GSM based two way communication system, with the ability to track the exact location of the child via google maps and also contains- SOS Light and a distreaa alarm to seek help from bystanders. The purpose of this device is to help the parents to locate their children with ease. At the moment there are many wearable's in the market which helps to track the daily activity of children and also helps to find the child using Wi-Fi and Bluetooth services present on the device.

**Merits:** This wearable over other wearable is that it can be used in any phone and it is not necessary that an expensive smartphone is required and doesn't want to be very tech savvy individual to operate.

**Demerits:** As, this device's battery gives short life-time. High power efficient model will have to be used which can be capable of giving the battery life for a longer time.

**4.Authors:** Dheeraj Sunehera, Pottabhatini Laxmi Priya.

**Title:** Children Location Monitoring on Google Maps Using GPS and GSM.

**Published in:** 2016 IEEE.

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.