[1] Authors: Akash Moodbidri, Hamid Shahnasser

Title: Child safety wearable device.

Published in: 2017 IEEE. This gadget is designed to make it easier for parents to find their

kids.

There are already a lot of wearables available on the market that may be used to track children's daily activity as well as to locate them utilizing the Wi-Fi and Bluetooth capabilities of the device.

**Merits:** The advantage of this wearable over others is that it can be operated with any phone; a high-end smartphone is not necessary, and it doesn't require a person to be highly tech knowledgeable.

**Demerits:** Due to its low battery life, this device.

[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 Link-It ONE board, programmed in embedded C, is used to construct the system. It is connected to temperature, heartbeat, touch, GPS, GSM, and digital camera modules. The work is innovative in that when a child is in need of rapid attention during an emergency, the system instantly notifies the parent or caregiver by sending an SMS.

**Merits:** The child's heartbeat, temperature, and touch are employed as parameters in a parametric analysis, and the results are shown.

**Demerits:** To put in place an IoT gadget that offers a comprehensive remedy for issues with child safety.

[3] Authors: Dheeraj Sunehera, Pottabhatini Laxmi Priya.

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

Published in: 2016 IEEE.

This study offers parents an Android-based tool to follow their kids in real-time. Through internet-connected channels, various gadgets can communicate with one another. The concerned gadget has an internet connection to the server. Parents can use the gadget to keep track of their kids in real-time or to protect ladies. The location services offered by the GSM module are used in the suggested solution. It enables parents to receive an SMS with their child's location information.

Merits: Uses an Android terminal and ad hoc networks, a child tracking system.

**Demerits:** This device cannot be used in rural areas.

[4] Authors: Aditi Gupta, Vibhor Harit.

Published in: 2016 IEEE.

Title: Child Safety & Tracking Management System by using GPS.

This study offered a model for child safety using smartphones that give parents the option to track their children's whereabouts as well as the ability for kids to send a fast message and their current location in case of an emergency via Short Message Services.

**Merits:** The benefits of smartphones that offer a wealth of capabilities like GPS, SMS, Google Maps, etc.

**Demerits:** This system is unable to detect child-like human behavior.

## References:

- [1] Aditi Gupta, Vibhor Harit, 'Child Safety & Tracking Management System by using GPS, GeoFencing & Android Application: An Analysis,' 2016 Second International Conference on Computational Intelligence & Communication Technology.
- [2] Dheeraj Sunehera, Pottabhatini Laxmi Priya, 'Children Location Monitoring on Google Maps Using GPS and GSM,' 2016 IEEE 6th International Conference on Advanced Computing.
- [3] M Nandini Priyanka, S Murugan, K. N. H. Srinivas, T. D. S. Sarveswararao, E. Kusuma Kumari,
- 'Smart IoT Device for Child Safety and Tracking' International Journal of Innovative Technology and Exploring Engineering, Volume 8, Issue 8, June 2019.
- [4] Akash Moodbidri, Hamid Shahnasser (Jan. 2017) 'Child safety wearable device', International Journal for Research in Applied Science & Engineering Technology, Vol. 6 Issue 2, pp. 438-444.