LITERATURE SURVEY

1. **TOPIC**:IOT Based Smart Gadget for Child Safety and Tracking.

AUTHOR: N. Manjunatha, H. M. Jayashree, N. Komal, K. Nayana.

DESCRIPTION: This paper is mainly streamed towards a child safety solution by developing a gadget that can be tracked via its GPS locations. A panic button on the gadget is provided to alert the parent via the GSM module calling for help. The parental android app is developed to manage and track the device anytime. Smart gadget device is always connected to the parental phone which can receive and make phone calls and also receive SMS on the gadget via a GSM module, also wireless technology is implemented on the device which is useful to bound the device within a region of monitoring range, if the device is moving out of monitoring range then an alert will be triggered on the binding gadget, this helps you keep a virtual eye on the child. A health monitoring system on gadgets checking for parameters like heart beat/pulse rate and temperature is included, which can be monitored on the parental app. The gadget also monitors whether it is plugged on by hand or not using a contact switch and alerts the parent as soon as it is unplugged.

2. **TOPIC:** Child Safety Monitoring System Based on IoT

AUTHOR: N. Senthamilarasi, N.Divya Bharathi, D.Ezhilarasi, R.B.Sangavi

DESCRIPTION: The overall percentage of child abuse cases filed nowadays in the world is about 80%, out of which 74% are girl children and the rest are boys. For every 40 seconds, a child goes missing in this world. Children are the backbone of one's nation, if the future of children was affected, it would impact the entire growth of that nation. Due to the abuse, the emotional and mental stability of the children gets affected which in turn ruins their career and future. These innocent children are not responsible for what happens to them. So, parents are responsible for taking care of their own children. But, due to economic conditions and aims to focus on their child's future and career, parents are forced to crave for money. Hence, it becomes difficult to cling on to their children all the time. In our system, we provide an environment where this problem can be resolved in an efficient manner. It allows parents to easily monitor their children in real time just like staying beside them as well as focusing on their own career without any manual intervention.

3. **TOPIC:** Child Monitoring and Safety System Using Wsn and Iot Technology

AUTHOR: P.Poonkuzhlai,R.Aarthi ,Yaazhini.V.M ,Yuvashri.S ,Vidhyalakshmi.G

DESCRIPTION: This paper presents the design and implementation of a portable IOT-based safety and health monitoring system for children through a sensor embedded health monitoring device for safety and emergency services. It is known that technological advancements are increasing at a faster pace. But the utilization of technologies in various sectors is very low. We know that people of different age groups face different difficulties. But the security for children is very low. There are a lot of cases registered regarding child safety. Nowadays, the schools and the parents

are very much worried about their school children for school transport and other places. So, the safety and monitoring of school children is very much difficult. In this project we are introducing the IOT based embedded system used in this project. So we propose a system to continuously monitor the parameters of the child and also their location for safety purposes. The system provides a Child tracking and monitoring system.

4. **TOPIC:** Survey on Child Safety Wearable Device Using IoT Sensors and Cloud Computing.

AUTHOR: Prakriti Agarwal, R Ramya, Rachana Ravikumar, Sabarish G, Sreenivasa Setty.

DESCRIPTION: Child safety is a major concern in any society due to the vulnerability of a child and consequently, higher rates of crimes against children. With this issue on our hands, a smart wearable Internet of Things sensor network for monitoring the environment of a child can be developed to help parents ensure the safety of their children. It must also necessarily include a mechanism for tracking the child. An advantage of this wearable device is that, according to its design, it can be accessed from any mobile device and does not mandate a lot of technical knowledge from the user to operate. The purpose of this device is to facilitate the guardian or parents in locating their child with ease and ensuring its well-being. The basic mechanism of this system involves monitoring the environment through sensor nodes, acquiring real- time data and transmitting this data to a cloud server. The data can be accessed by users through a web-based interface present on this cloud server. The wearable also functions to send alerts to the user through a mobile application in case an emergency condition is detected by it. The design of this model involves developing a medium for communication between the parent/guardian and the child's wearable device. The child's location is tracked using GSM mobile communication to specify the location of the child in realtime. We have surveyed relevant papers and have discussed the different methodologies that have been used to achieve similar but different results. We later also compare these papers using their advantages and disadvantages and we try to bring out the uses from their results.

5. **TOPIC:** IoT-based Child Security Monitoring System.

AUTHOR: Lai Yi Heng1,Intan Farahana Binti Kamsin.

DESCRIPTION: Nowadays, crime rate associated with children keeps increasing due to which draws peoples' attention regarding child safety. This research is conducted to propose a child security smart band utilizing IoT technology. Online questionnaires and semi-structured interviews are methodologies used to collect data. The online questionnaire gains feedback by sending questions electronically, where answers need to be submitted online. In the semi structured interview, researchers meet and ask respondents some predetermined questions while others being asked are not planned in advance. Through information obtained, a smart band has been proposed to monitor the safety of children. By this, parents know what is happening remotely and can take actions if something goes wrong. The future improvements of this device will be adding functions and software to make it works like a phone such

as messaging, gallery, Google, YouTube, meanwhile, adding more child security features so that child safety is guaranteed.