#### LITERATURE SURVEY

**Topic: Smart Wearable Device for Child Safety Using IOT** 

Author: HM SABAA FATHIMA, SENTHIL MURUGAN

**Technology**: Wi-Fi and Bluetooth services present on the device. But Wi-Fi (Wireless Fidelity) and Bluetooth appear to be an unreliable medium of communication between the parent and child. Therefore, the focus of this project is to have an SMS text enabled communication medium between the child's wearable and the parent as the environment for GSM mobile communication. The parent can send a text as SMS with specific keywords such as "LOCATION", "TEMPERATURE", "SOS", "BUZZ", etc.

Advantages: Holding the battery for long time

Disadvantages: SMS content through GSM is the disadvantage of these method

### **Topic: Child Safety Wearable Device**

Author: Akash Moodbidri

**Technology**: Wi-Fi and Bluetooth appear to be an unreliable medium of communication between the parent and child. Therefore, the focus of this paper is to have an SMS text enabled communication medium between the child's wearable and the parent as the environment for GSM mobile communication is almost present everywhere. The parent can send a text with specific keywords such as "LOCATION TEMPERATURE UV SOS BUZZ", etc.,

Advantages: Real-time location, surrounding temperature and sos light along with distress alarm buzzer

Disadvantages: SMS content and file temporarily on the external microSD card

## Topic: CHILD SAFETY WEARABLE DEVICE USING RASPBERRY PI

Author: Arun Francis G, 2Ramiyadevi K, 3Janani I,

**Technology**: The Wi-Fi and Bluetooth capabilities of the app. But Wi-Fi and Bluetooth are proving to be an inefficient means of the Wi-Fi and Bluetooth capabilities of the app. But Wi-Fi and Bluetooth are proving to be an inefficient means of communication between parent and child. This project focuses on making an SMS text activated to communicate between the wearable child and a parent as the framework for GSM Mobile . The wearable device will respond in real time with a text

containing the exact location of a child, which will provide details on the position of the child and the ambient temperature. The new method implemented was using a pi camera to capture the image of a person who is in the opposite position of child communication between parent and child. This project focuses on making an SMS text activated to communicate between the wearable child and a parent as the framework for GSM Mobile Communication. The wearable device will respond in real time with a text containing the exact location of a child, which will provide details on the position of the child and the ambient temperature. The new method implemented was using a pi camera to capture the image of a person who is in the opposite position of child.

Advantages: Private security system to children crime incidents

**Disadvantages**: SMS technology and mail send to the parents

### **Topic: Wearable Child safety System**

Author: Dr. A N Jayanthi, L.Malathi, S.Munaf, Dr.A.Bharathi

Technology: Wireless Fidelity (Wi-Fi) and Bluetooth services that are available on the device. But both of them seems to be an unsecured communication in between the parent and the child. Therefore, the objective of this paper is SMS (Short message service) text enabled link in between the child's wearable and the respective parent .(Wi-Fi and Bluetooth) effectively \_present in the market which helps track the every- day movement of youngsters however they give off an impression of being a questionable vehicle of correspondence between the parent and kid. Our task dependent on SMS arrangement utilizing GPS framework to help guardians to follow their kid's area continuously. The parent can send a book as SMS with explicit watchwords, for example, "Area", "TEMPERATURE", "BUZZ", and so forth, to the wearable gadget however they give off an impression of being a questionable vehicle of correspondence between the parent and kid. Our task dependent on SMS arrangement utilizing GPS framework to help guardians to follow their kid's area continuously. The parent can send a book as SMS with explicit watchwords, for example, "Area", "TEMPERATURE", "BUZZ", and so forth, to the wearable gadget.

Advantages: Limited power consumption

Disadvantage: SMS based

#### **TOPIC: IOT BASED CHILD SAFETY DEVICE**

Author: Bhogamma, Veeresh Pujari, Baswaraj Gadgay

Technology: human entrenched devices, home automation systems and illumination controls; smart phones are most of the times used to measure the globe around them. Weather conditions, tides, flood defences can be measured by sensor network. The two important aspects of IOT are: device scheme and server architecture both supports to IOT. The function of receiving SMS(message) or MAIL and calls are all due to the internet connection to Arduino UNO bycu. The supplementary modules are employed which will provide the present situation of the child via message/MAIL. The external alert systems included here is to indicate the distress condition is SOS Light indicator and Alarm Buzzer to produce sound, both are programmed in Arduino UNO board.

Advantages: Distress alarm buzzer

Disadvantages: SMS and mail method

Topic: Multi-sensor Wearable

for Child Safety

Author: Ushashi Chowdhury

Technology: Alert parents through the cell phone So that they can take immediate action. This paper focus on the SMS text enabled communication. Parents can send SMS with Some keywords and the device reply back. The device can Detect the child's approximate location, it can detect the body Temperature and the surrounding temperature, humidity and Also the heartbeat of a child. For the emergency situation, the Device would have some measures like an alarm buzzer, SOS Light which will notify the bystanders to help the child alert parents through the cell phone so that they can take immediate action. This paper focus on the SMS text enabled communication. Parents can send SMS with some keywords and the device reply back. The device can detect the child's approximate location, it can detect the body temperature and the surrounding temperature, humidity and also the heartbeat of a child. For the emergency situation, the device would have some measures like an alarm buzzer, SOS light which will notify the bystanders to help the child.

Advantages : appropriate location

Disadvantages: SMS method

# Topic: child safety wearable device

Author: Afzal Hussain

**Technology**: Ardunio controller and sensors such as temperature LM35, flex sensor MEMS accelerometer, pulse rate sensor, sound sensor. A buzzer, LCD, GSM and GPS are used in this project. When the woman is in threat, the device senses the boGPS are used in this project. When the woman is in threat, the device senses the body sensor crosses the threshold limit the device gets activated and traces the location of the victim using the GPS module. Advantage: device compact in size and real time location

Disadvantages: SMS method

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