LITERATURE SURVEY

2016- Child Safety & Tracking Management System

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This proposed application is developed on android platform for this application the basic techniques required mentioned below:

(a) Geo-Fencing

(b) GPS (Global Positioning System)

(c) SMS (Short Messaging Service)

This application is designed for locating missing children. The solution represented in this paper takes the advantages of smart phones which offers rich features like Google maps, GPS, SMS etc. Some of the best works implemented in past relies on SMS based tracking which is not helpful to get an accurate location in our proposed system we have provided real time tracking. We have added Geo-fencing and Emergency messaging services to enhance the system

2017- Child Safety Wearable Device

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The child safety wearable device is capable of acting as a smart loT device. It provides parents with the real-time location, surrounding temperature, UV radiation index and SOS light along with Distress alarm buzzer for their child's surroundings and the ability to locate their child or alert bystanders in acting to rescue or comfort the child. The smart child safety wearable can be enhanced much more in the future by using highly compact Arduino modules such as the LilyPad Arduino which can be sewed into fabrics. Also a more power efficient model will have to be created which will be capable of holding the battery for a longer time

2019- Child Safety Wearable Device

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This paper gives the result for the parent in two different ways. The first one is they get an alert message (SMS) for the registered phone number. The next one is they receive a graphical representation which shows the Latitude, Longitude, MEMS Sensor and Vibration sensor of the child's activities through "Thing Speak". From this notification the parents can find their child in critical state. By this device we can avoid violence against children. This is one step to reduce rape, violence, theft etc.

2019- Multi-sensor Wearable for Child Safety

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The proposed device is cheaper to design and compatible to various platforms like android, IOS, windows etc. rather than apps. Communication in terms of Bluetooth and GSM both viable. GSM is a better option because it can support both phone calls and SMS. Filtering of interference signals is required for better effectiveness. It will send data to the parents in a regular interval as well as on trigger based like when parent request for data and when the data exceeds the particular threshold value.

2020- Intelligent Child Safety System using Machine Learning in IoT Devices

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This paper has focused mainly on the autonomous operation of the safety system. Combined usage of three different vitals has increased the accuracy of detecting the abnormal situation. Usage of machine learning has improved the accuracy and made the system intelligent for a general case compared to a threshold detector when tested on different sets of subjects.

The system can be miniaturized to make it more concealing. The efficiency of the system can be increased when it uses a dataset which has been developed by monitoring BVP, GSR and temperature of children. By tuning the parameters of the machine learning model, this work can also be extended as a potential device for ensuring women safety.

2020- Smart Child Safety Wearable Device

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The project undertaking would help in improving the wellbeing and security of children. This will help the authorities to solve the child missing cases easily. It will improve social security as well as parents' insecurities. This project will reduce crime rates in society. This takes low cost while implementing and building so that everyone can afford this. Everyone in this era using smart devices and gadgets which will be helpful for the parents to use IOT based device. This IoT based device brings a revolutionary change in the current problems regarding child safety issues. Child safety is the most common problem in the world. By this project, the child missing and kidnap issues can be brought down and help the society.

2021- Design of Wearable Device for Child Safety

M.Benisha, Thandaiah Prabu R, Gowri.M, Vishali.K, Divya Priyadharshini.R, M. Anisha, Ponmozhi Chezhiyan, C. Jim Elliot

The planned mechanism provides a better methodology to view & track the location of the children in terms of latitude and longitude which can additionally track using Google maps. This way benefits to decrease the misconduct against child being safe and secure is the mandate of the day. The major work behind this project is to design and formulate a gadget which is so condensed in itself that provide the advantages of the own safety method specially for the children. This design is proposed to solve most of the dangerous disputes challenged with child and will help them to be protected. It is used to locate the lost children in any time with the real time location and also send the notification to their parent or guard. It is used by the Arduino module to overcome GSM by using IT to better Communication and heartbeat sensor and MEMS accelerator is also added. If an accident happens, message with location sends instantly to the registered contacts and also to the nearest police stations and rescue the children.