

VIMALNISHANTHAN T (19ECL237)

SURYA PRAKASH S (19ECR200)

SRINATH A (19ECR186)

VISHNU PRASATH T (19ECR217)

SUJITH S (19ECR198)

LITERATURE SURVEY

IOT BASED SAFETY GADGET FOR CHILD SAFETY

MONITORING & NOTIFICATION

Smart IoT device for Child Safety and Tracking - Child safety and tracking is a major concern as the more number of crimes on children are reported nowadays. With this motivation, a smart IoT device for child safety and tracking is developed to help the parents to locate and monitor their children. The system is developed using LinkIt 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. The parameters such as touch, temperature & heartbeat of the child are used for parametric analysis and results are plotted for the same. The above system ensures the safety and tracking of children.

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

Design of Wearable Device for Child Safety-Now-a-days attacks on children are increasing at an unprecedented rate and the victims are in dangerous conditions, where they are not allowed to contact the family members. The key idea planned in this research work is an advanced technology that offers “Smart Child Safety” for the children. Therefore, the awareness of this method is to send an SMS from children's wear tool to their parent or guardian. In the prevailing structure, there is no monitoring method for child, it should create many problems for them and the no protection mechanism to protect the child from the misbehavior. In addition, there is no aware device for the child's protection; it must be completed by hand only. Thus, the planned method will be highly effective when compared to the other existing techniques in helping the victims. Moreover, it doesn't need any manual operation. This paper recommends a newfangled technology for child protection by using GSM so that the children will not feel abandoned while facing such social problems. The problems overawed here using Arduino UNO, GSM, sensors, MEMS, temperature and panic button by using IOT. In such case, Heartbeat Sensor track the best rate for children and sends the emergency message by using the GSM to save contacts. Such method is actually supportive for children in today's world. Hence, this provides a security to the children and secures the feeling of parents.

Safety Device for Children Using IoT and Deep Learning Techniques - The safety and security of children is a major problem in the current era. The children are too young to take care of themselves. We cannot monitor the children at all times in school, play area, and outside place. In this paper, we discuss the concept of child safety device based on Internet of things. The aim of this device is to provide safety to the child by allowing the parent to locate the child and view their surroundings. This device can be used to monitor the temperature and motion of the child. If any problem persists, the GSM mobile communication module automatically sends a text message to the parent as SMS. The other features of the device are emergency light and alarm buzzer which are activated when the button is pressed by the child in a distress situation to seek the attention of the bystanders. The accelerometer and vibration sensors are used to detect the motion of the child. The camera is used to capture the environment of the child. The image taken is processed using convolutional neural network (CNN) which predicts the background like play area, railway station, beach, road, or classroom. The GPS module is used to record current location of the device which is used to track the device if the child is missing. Hence, this device provides a security cover to the child in today's time.