Literature Survey Based on Iot Based Safety Gadget for Child Safety Monitoring and Notification

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Maximum Marks	

Mirjami Jutila, Esko Strömmer, Mari Ervasti, Mika Hillukkala, Pekka Karhula Juhani Laitakari (2015) Safety services for children: a wearable sensor vest with wireless charging

Wearable sensors constitute an increasing market in providing various promising opportunities for improving and controlling safety issues for children in day care and schools. This paper presents the technological enablers and requirements for building a complete end-to-end energy-efficient safety system. Our work introduces a proof-of-concept for a wearable sensor vest with integrated wireless charging, designed to enhance the security of children. The wireless charging takes place in the ordinary repository for the vests, such as in a wardrobe or a coat rack, without requiring any specific actions from the user. The developed sensor vest provides information about the location and well-being of children, based on received signal strength indication, global positioning system, accelerometer, and temperature sensors. This paper also discusses the experiences of the "safety service for children" school pilot, which utilized various sensors with end-to-end applications. Piloting and technological implementations are based on a participatory study conducted among children, teachers, and parents, to gain important knowledge and understanding about the real user needs and service system usability requirements

N. Manjunatha H. M. Jayashree N. Komal K. Nayana(2020) 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

S. Rajalakshmi S. Angel Deborah G. Soundarya V. Varshitha K. Shyam Sundhar (2020) 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.

REFERENCE

Mirjami Jutila, Esko Strömmer, Mari Ervasti, Mika Hillukkala, Pekka Karhula Juhani Laitakari *Personal and Ubiquitous Computing*

N. Manjunatha H. M. Jayashree N. Komal K. Nayana International Journal of Research in Engineering, Science and Management Volume-3, Issue-6, June-2020

 S. Rajalakshmi S. Angel Deborah G. Soundarya V. Varshitha K. Shyam Sundhar Advances in Intelligent Systems and Computing (AISC,volume 1163)