LITERATURE SURVEY

PROJECT TITLE:-IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING AND NOTIFICATION

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JOURNAL PAPERS AND REFERENCE

TITLE:- Child Safety Monitoring System Based on IoT To cite this article: N. Senthamilarasi et al 2019 J. Phys. N. Senthamilarasi1, N.Divya Bharathi, D.Ezhilarasi, R.B.Sangavi.,Assistant Professor ,UG scholor Information Technology Department, Panimalar Institute of Technology, Chennai, India. senthamil.cse2009@gmail.com , divyabharathi175@gmail.com , ezhilarun2013@gmail.com sangavi151297@gmail.com.

Approximately 80% of all child abuse cases reported now around the world involve girls, with the other 26% being boys. In this world, a child goes missing every forty seconds. Children are the foundation of a country; if their future was threatened, it would have an effect on the development of the whole country. Children who experience abuse lose their emotional and mental stability, which has a negative impact on their career and future. The things that happen to these defenceless kids are not their fault. Therefore, parents are in charge of raising their own children. However, due to the state of the economy and a desire to concentrate on the future and profession of their children, parents are compelled to yearn for money. Consequently, it becomes challenging for them to constantly cling to their kids. We have created a setting in our system where this issue can be effectively solved. It enables parents to focus on their own careers and effortlessly keep an eye on their kids in real time, just as though they were standing right alongside them.

TITLE:- Child Monitoring and Safety System Using Wsn and Iot Technology
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,Associate Professor,Assistant Professor, RMD Engineering College, Thiruvallur, India, , poonkuzhali.ece@rmd.ac.in1, aarthi.ece@rmd.ac.in U.G Students, Department of Electronics and Communication Engineering, RMD Engineering College., Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021.

In this study, the design and implementation of a sensor-embedded health monitoring device for safety and emergency services are presented along with a portable IOT-based safety and health monitoring system for kids. It is well known that technological development is accelerating quickly. However, very little technology is used across a wide range of industries. We are aware that challenges are unique to each age group. However, there is practically little security for kids. Regarding child safety, numerous incidences have been reported. Schools today worry a lot about how their students will get to school and other locations, as do the parents. As a result, it is extremely difficult to supervise and ensure the safety of schoolchildren. We are introducing an embedded system that is IOT-based in this project. To ensure the child's safety, we propose a system that would constantly track their location as well as their physical characteristics. Smart child tracking and monitoring is offered by the system.

TITLE:- **CHILD MONITORING SYSTEM USING GPS**
CHILD TRACKING SYSTEM Sadhana B.,Assistance professor.,Department of Information Science and Engineering CEC Bantwal.Navya A, Nidhishree, Vidhyashree, Vishwa Students Department of Information Science and Engineering CEC. *International Journal of Engineering Applied Sciences and Technology, 2022* **Vol. 7, Issue 1, ISSN No. 2455-2143.**

Parents today work long hours while also raising their children. Both parents must keep an eye on their child's activities due to the rising security dangers children encounter. This essay suggests a strategy for keeping an eye on a child's activities using an Android phone. Technology can also give parents important information on the security of their children. The report also demonstrates how to use this method to surround a youngster in safety. The system can keep an eye on the child's activities and surround them in a safe area. Additionally, it can give the parents the precise geographical information they require. The device has a video camera. It may be controlled by following the instructions from the software hand feature on an Android phone. The child's motions can be recorded using the video camera. The main objective of this project is to develop an IoT-based child monitoring system that will enable parents to monitor and recognise their children's actions even while they are not at home. It is a cutting-edge, clever, and secure child monitoring system made to effectively care for a newborn. This strategy takes into account all the minute details required for the child's care and protection both inside and outside of the institution. utilising tools and techniques including the Internet of Things (IOT), live video monitoring, cloud computing (data storage), and user-generated content. A user-friendly web application promotes intelligence and innovation (for User Controls). The child is loaded with

various sensors and modules in order to detect every single activity. Anything gathered from the cloud will be used to store and analyse sensors and modules on a regular basis.

TITLE:- **IoT-based Child Security Monitoring System Lai Yi Heng1,* Intan Farahana Binti Kamsin2** *1,2 Asia Pacific University of Technology and Innovation, Technology Park, Bukit Jalil, Kuala Lumpur, Malaysia *Corresponding author. Email: TP050974@mail.apu.edu.my.,* **Atlantis Highlights in Computer Sciences, volume 4 Proceedings of the 3rd International Conference on Integrated Intelligent Computing Communication & Security (ICIIC 2021).**

Children's involvement in crime is on the rise today, which makes people more concerned about child protection. The goal of this research is to suggest an Internet of Things-based smart band for child safety. Data collection techniques include semi-structured interviews and online questionnaires. By providing questions electronically and requiring respondents to submit their responses online, the online survey collects feedback. In a semi-structured interview, the researcher meets the respondents and poses some preset questions while posing others that were not before thought of. A smart band has been proposed to monitor children's safety based on the information obtained. Parents can take action if something goes wrong because they are aware of what is going remotely thanks to this. In the future, this device will be improved by adding features and software to create It functions like a phone, including capabilities like messaging, galleries, Google, and YouTube while also enhancing child safety measures.

TITLE:- **ARCTIC: An IoT-based System for Child Tracking in Day Care Shabna Siraj Computer Science and Engineering, master's level (120 credits) 2019 Luleå University of Technology Department of Computer Science, Electrical and Space Engineering.**

Since the invention of cellphones, technology has significantly improved the quality of our lives.The combination of small sensor devices with smartphones, a spectacular engineering achievement, offers a good chance to take advantage of the potential for real-time applications. Beacons for Bluetooth Low Energy (BLE) are tiny, low-power gadgets that broadcast signals that nearby Bluetooth-enabled gadgets can pick up. Combining localization with these devices' received signal strength indication (RSSI), it is possible to locate them. Children at daycare facilities can learn more and have fun by going on field trips. However, there is a chance that kids on field excursions will get lost in the crowd. Currently, giving them bright visibility vests is the typical method of reducing this issue. It entirely depends on sight to find a lost youngster. To address this issue, this thesis suggests and creates ARCTIC (an IoT based system for tracking kids in daycare), a programme to monitor kids when they are on field trips, etc. ARCTIC was created with the user's convenience in mind. accompanying students with teachers. The Arctic prototype system is also presented in this thesis. It is to use BLE technology to track children on such field trips. An Android application was created. It was created to measure the distance between neighbouring beacons coming from With their smartphones, teachers can determine a

student's approximate position when they trilaterate, leaving the maximum set distance. In the end, a user's research conducted to examine how the users of the system developed .

TITLE:- Smart IOT Device for Child Safety and Tracking M Nandini Priyanka, S Murugan, K N H Srinivas, T D S Sarveswararao, E Kusuma Kumari. International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-8 June, 2019.

The increased number of recorded crimes against children nowadays raises serious concerns about kid safety and tracking. In order to assist parents in finding and keeping an eye on their kids, a smart Internet of Things (IoT) device for child safety and tracking has been developed. The system is made with a LinkIt ONE board that has embedded C programming and is interfaced with temperature, heartbeat, touch, GPS, GSM, and digital camera modules. The work is novel in that when a child is in need of immediate attention during an emergency, the system automatically notifies the parent or caregiver by sending an SMS. The child's touch, temperature, and heartbeat are employed as parameters for the parametric analysis, and the results are presented for the same. The aforementioned mechanism guarantees the tracking and safety of children.

TITLE:- IoT Based Smart Gadget for Child Safety and Tracking N. Manjunatha1, H. M. Jayashree2, N. Komal3*, K. Nayana4 *1Assistant Professor, Department of Electronics and Communication Engineering, East West Institute of Technology, Bengaluru, India 2,3,4Student, Department of Electronics and Communication Engineering, East West Institute of Technology, Bengaluru, India *Corresponding author: nkomaljain12@gmail.com.,* **International Journal of Research in Engineering, Science and Management Volume-3, Issue-6, June-2020 www.ijresm.com | ISSN (Online): 2581-5792.**

This study focuses on designing a device that can track a child's whereabouts using GPS, as well as having a panic button that can warn the parent by using a GSM module to call for help. Android parental software is created to control and track the device at any time. A smart gadget device is always linked to the parental phone, which can receive and make calls as well as send and receive SMS on the gadget via GSM module. Wireless technology is also implemented on the device, which enables you to bind the gadget within a region of monitoring range; if the gadget moves out of monitoring range, an alert will be triggered on the binding gadget, helping you keep a virtual eye on your child. Health monitoring software for a device Checking for factors that can be monitored by a parental app includes heart rate, pulse, and temperature. Using a contact switch, the gadget also keeps track of whether it is plugged in or not and notifies the parent if it is unplugged.

TITLE:- "Smart and Secure IoT based Child Monitoring System"Dipali Badgujar1, Neha Sawant2, Prof. Dnyaneshwar Kundande3.,*1,2"Pursuing Bachelor of Computer Engineering & Savitribai Phule Pune University", Suman Ramesh Tulsiani Technical Campus Faculty of Engineering Kamshet, Pune, India3"Professor of Computer Engineering & Savitribai Phule*

IOT is continually improving, and at the same time, its security is improving. In this proposed system, the primary focus is on child remote monitoring. We also use radar devices and obstacle sensors to detect alerts when children enter danger zones or are approaching dangerous objects. Alerts are then sent to the caregiver via mobile device in the form of an alarm or notification. We use a basic necklace that is handed to the baby for sensing purposes, with a waterproof ultrasonic obstacle sensor installed inside of it so that the locket may inform the caregiver via a mobile device and a solar panel for battery backup. In the shoes of the caretaker, this energy will depend on the distance travelled by the caretaker. A general technique for quick peak detection is employed in this suggested system to measure depth and height. Prior to collecting the maximum and minimum values for each segmentation, the signal curve is first evenly divided. To ensure that only the true peaks remain, the repeated maximum and minima values are eliminated, and all fake peaks are merged. According to experimental data, the proposed method is more accurate and quicker at peak identification than existing methods, and it is suited for a wide range of waveforms.

TITLE:- **Student Monitoring and Security System over IOT Santhosh Raj R1, Kannan S A2, Harikrishnan R3, Sruthi Raj S4,Asst Prof, Department of Electrical and Electronics Engineering, College of Engineering, Perumon, Kollam, India1,2 U G Scholars, Dept of Electrical and Electronics Engineering, College of Engineering, Perumon, Kollam, India3,4., International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering NFTPCOS-18National Conference on Future Technologies in Power Control and Communication Systems College of Engineering Perumon, Kollam, Kerala Vol. 1, Special Issue 2, March 2018.**

In the modern world, where child abuse and traffic accidents are on the rise, it is very difficult to give students a sense of security. Here, we provide a student surveillance and security system for school buses that let parents keep an eye on their kids from anywhere in the world utilising contemporary communication technologies and the Internet of Things [IOT]. Parents can track their children from anywhere in the world by utilising a GSM-GPS module. The RFID module records student information and attendance. After then, parents receive it. Thus, parents can enter information about their children. The security system forbids driving while intoxicated and excessive speeding.

TITLE:- **Child Safety Monitoring System Based on IoT N. Senthamilarasi1, N.Divya Bharathi2, D.Ezhilarasi3, R.B.Sangavi4 [1]Assistant Professor ,[2],[3],[4]UG scholor Information Technology Department, Panimalar Institute of Technology, Chennai, India.**

[1]senthamil.cse2009@gmail.com,[2]divyabharathi175@gmail.com,[3]ezhilarun2013@gmail.com[4]sangavi151297@gmail.com **N. Senthamilarasi** *et al* 2019 *J. Phys.*

Approximately 80% of all child abuse cases reported today around the world involve girls, with the remaining 26% involving boys. In this world, a child goes missing every forty seconds. Children are the foundation of any country; thus, if their future was threatened, it would have an impact on that country's overall development. ed, it would have an impact on that country's overall development .nation. The emotional and mental stability of the children is impacted by the maltreatment, which in turn leads to It destroys their future and career. The things that happen to these defence less kids are not their fault. Then, parents They are in charge of raising their own children. However, given the state of the economy and their desire to put Parents are compelled to yearn for their children's futures and careers. money. Consequently, it becomes challenging to hold onto their There are kids everywhere. We have a setting in our system where this issue can be fixed in a timely manner. It enables parents to watch over their kids in real time just like they were there with them as well as concentrating on their own careers without any help from others.The percentage of child abuse cases reported globally today is over 80%, of which children who are 74% girls and 26% boys. In this world, a child goes missing every forty seconds. Children The future of children would have an impact on the overall development of that country because they are the foundation of it.nation. Due to the emotional and physical violence, children's mental health is impacted, which has an It destroys their future and career. The things that happen to these defence less kids are not their fault. Then, parents They are in charge of raising their own children. However, given the state of the economy and their desire to put Parents are compelled to desire wealth notwithstanding their children's futures and careers. Consequently, it becomes challenging to hold onto their There are kids everywhere. We have a setting in our system where this issue can be fixed.in a timely manner. It enables parents to watch over their kids in real time just like they were there with them as well as concentrating on their own careers without any help from others.