

AMELIARATING CHILD AND WOMEN SAFETY BY HOLDING UP DETECTION BASED ON INTERNET OF THINGS

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Abstract

Now a days, women and children are facing various issues like sexual assaults. Such violence will definitely have huge impact on the lives of victim. It also affects their health and their psychological balance. These kinds of violence keep on increasing day by day. Even school children are kidnapped and abused. We are living in a society where a nine months old girl child doesn't have security, the child was kidnapped, raped and then murdered. The Internet of Things (IoT) has brought a paradigm shift in the way we interact with everyday objects, making them smarter and more connected. One of the areas where IoT can have a significant impact is child safety monitoring. This project proposes an IoT-based safety gadget for child safety monitoring and notification. The gadget will consist of a wearable device, such as a smartwatch, which will be worn by the child, and a mobile app that will be installed on the parent's smartphone. The wearable device will be equipped with various sensors, including GPS, accelerometer, and heart rate monitor, to collect data about the child's location, movement, and health status. The mobile app will be connected to the wearable device via Bluetooth and will continuously receive data from the sensors. The app will have a user-friendly interface that will display real-time data about the child's location, movement, and health status. The app will also have an alert system that will notify the parent in case of any abnormal behavior or emergency situations, such as the child leaving a predefined safe zone, falling down, or experiencing a sudden change in heart rate. The proposed IoT-based safety gadget for child safety monitoring and notification can help parents keep track of their children's whereabouts, movements, and health status, ensuring their safety and well-being. With the increasing number of child abduction cases and accidents, this gadget can be a valuable tool for parents to ensure their child's safety and peace of mind.

Keywords : Women Safety, Safety using Arduinio, IOT Based Women Safety.

INTRODUCTION

Missing Children are the main reason for the development of this project. The incidence of missing children is no longer a weird thing in the shopping mall. Children at the age of three to four years require special attention from parents to control their movements. Parents need to be aware of their children to avoid the incidence of missing children in the shopping mall. This is because of leave a child alone can increasing the risk of losing it or led to kidnapping. Therefore, this project is developed and applied to help the children. In modern India, children continue to face social challenges and are often victims of abuse and violent crimes and, according to a global poll conducted by Thomson Reuters, India is the "fourth most dangerous country" in the world among the G20 countries. This project focuses on the security system that is designed solely to serve the purpose of providing safety and security to children so as they never feel helpless while facing such social challenges.

NEED OF THE STUDY

This may cause the child to overlook and possibly they will be lost or misguided. This children tracking system is developed to help parents or guardians to protect their children safety, especially when in public. This device is to replace the conventional method of monitoring the child safety in public. The use of this children tracking system is important to avoid undesirable things happen. This is the reason to develop this project for children security.

STATEMENT OF THE PROBLEM

There are multiple news-sharing apps used by a single user and are often spammed with notifications. There is also a lot of fake news which gets shared. A news-sharing app wants to help users find relevant and important news easily every day and also understand explicitly that the news is not fake but from proper sources. While Opening app for reading a news, I'm literally getting too much of advertisements in-between the content because of these ads I was unable to read the content properly and it makes me feel irritated, App wants to help users find relevant and important news easily everyday understandably explicitly without the ads.

OBJECTIVES OF THE STUDY

These kinds of violence keep on increasing day by day. Even school children are kidnapped. We are living in a society where a nine years old girl child doesn't have security, the child was kidnapped, raped and then murdered. On witnessing those violations against women, its impulses us to do something for children safety. So, in this project we have planned to propose a device which will act as a tool to provide security and ensures the safety of the women and the children. Microcontroller, IOT and GPS module are used to send notifications and current location of children to police

station/Parents mobile numbers in their contact. This project will help us to rescue many children from those fiendish in the society. This child detector technology will contribute to child safety so that parents will feel more secure to let their kid out in public.

MATERIALS & METHODSALGORITHM

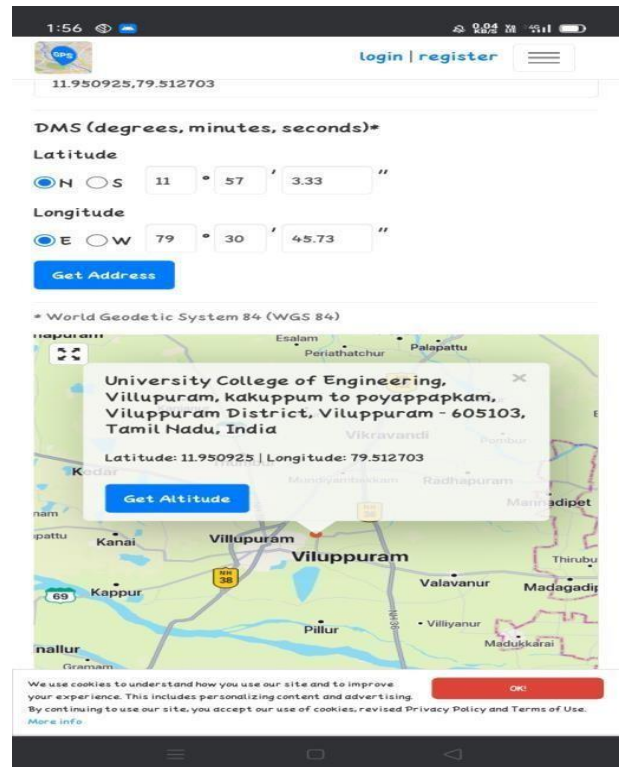
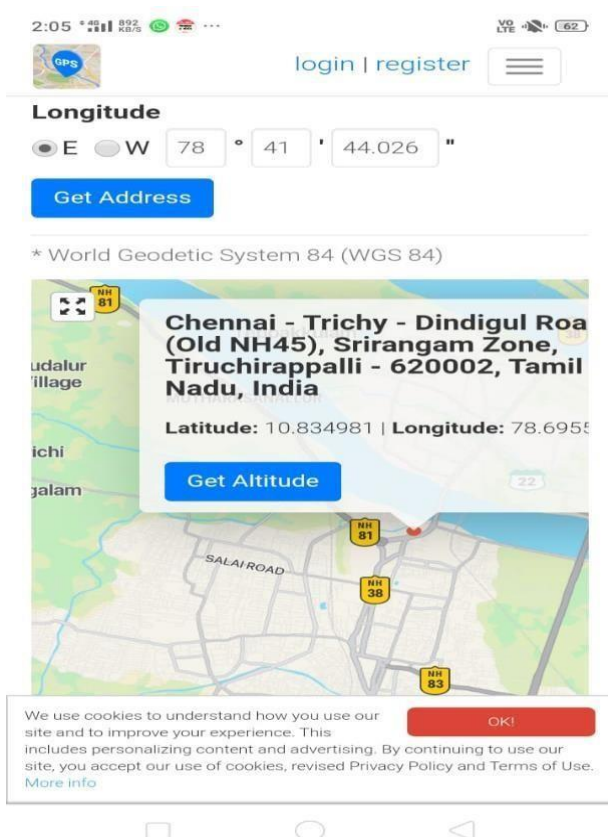
ANN-Artificial Neural Network

CNN-Convolutional Neural Network Algorithms are used in this proposed system

MODULES

1. User data collection
2. Gps location Tracking
3. Crowd source Children localisation
4. Location Monitoring
5. Emergency Button tracking

RESULT



CONCLUSION

This proposed design will help to solve critical issues faced by women in the near past with technologically sound equipment's and ideas. While the society may or may not change for the

enhanced, the power to be autonomous, self assured and truly free can come with arming oneself with the best possible device The system will provide correct information as physical devices gives guarantee for the same. Our primary goal of this work is to ensure every woman in our society to feel safe and secured. The system will be portable shock proof and cost effective.

REFERENCES

1. Lien-Wu Chen, Hsein-Min Chen. Crowdsourced Children Monitoring and Finding with Holding up Detection Based on Internet of Things Technologies. IEEE Sensors Journal, VOL.19, NO 24, 2019.
2. J. Wang, Y. Wang, D. Zhang, and S. Helal, "Energy saving techniques in mobile crowd sensing: Current state and future opportunities," IEEE Commun. Mag., vol. 56, no. 5, pp. 164–169, May 2019.
3. P. Visconti, R. de Fazio, P. Costantini, S. Miccoli and D. Cafagna, "Innovative complete solution for health safety of children unintentionally forgotten in a car: A smart Arduino-based system with user app for remote control", IET Science Measurement & Technology, vol. 14, no. 6, pp. 665-675, 2020.
4. K. Yu, Z. Guo, Y. Shen, W. Wang, J. C. Lin, T. Sato, "Secure Artificial Intelligence of Things for Implicit Group Recommendations", IEEE Internet of Things Journal, 2021, doi: 10.1109/JIOT.2021.3079574.
5. Arun Francis G, Janani I, Kavya S and Ramiyadevi K. Child Safety Wearable Device Using Raspberry Pi. Waffen-UND Kostumkunde Journal. 11(2). 2020. pp.135-137.
6. Y. Sun, J. Liu, K. Yu, M. Alazab, K. Lin, "PMRSS: Privacy-preserving Medical Record Searching Scheme for Intelligent Diagnosis in IoT Healthcare", IEEE Transactions on Industrial Informatics, doi: 10.1109/TII.2021.3070544.
7. Dr. J. Jegathesh Amalraj, J. Jereena John and S. Banumathi. IOT Sensors And Applications: A Survey. International Journal Of Scientific & Technology Research. 8(8). 2019. pp.998-1003.