

“WOMAN SAFETY DEVICE”

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Abstract: Human Safety is an emerging paradigm for understanding global vulnerabilities whose proponents challenge the traditional notion of national security by arguing that the proper referent for security should be at the human rather than national level. Understanding of security involves a number of research fields, including development studies, international relations, strategic studies, and human rights. The system to be implemented with the help of technologies like Machine learning and IoT will be activated with the recognition of a human's voice and notify the nearest police station along with the victim's details and location. And main purpose is an alarm system that will also be activated on the nearby streets with a connection provided with the clip using IoT techniques. The system implementation will help provide maximum safety to the people along with reducing the ongoing risks.

Women are adept at mobilizing diverse groups for a common cause. They often work across ethnic, religious, political, and cultural divides to promote peace. We are all aware of importance of women's safety, but we must realize that they should be properly protected. so we are using this device especially for women safety

Keywords: HMM ,CSR,Safety,IOT,GSM, Woman

I. INTRODUCTION

Automatic continuous speech recognition (CSR) has many potential applications including command and control, dictation, transcription of recorded speech, searching audio documents and interactive spoken dialogues. The core of all speech recognition systems consists of a set of statistical models representing the various sounds of the language to be recognised. Since speech has temporal structure and can be encoded as a sequence of spectral vectors spanning the audio frequency range, the hidden Markov model (HMM) provides a natural framework for constructing such models. HMM is very rich in mathematical structure and hence can form the theoretical basis for use in a wide range of application. HMM model, when applied properly work well in practice for several important application

Real-world processes generally produce observable outputs which can be characterized as signals. The signals can be discrete in nature or continuous in nature. The signal source can be stationary (i.e., its statistical properties do not vary with time), or non-stationary (i.e., the signal properties vary over time). The signals can be pure or can be corrupted from other signal sources or by transmission distortions.

Speech recognition is a process of converting speech signal to a sequence of word. Various approach has been used for speech recognition which include Dynamic programming and Neural Network. In this seminar we will try to bridge speech recognition and HMM and figuring out how HMM can be effectively used in speech recognition problem.

2.OBJECTIVE:

The main purpose of this paper is to introduce the concept of a women's safety device for application in India. The main purpose of this device is to act as an emergency device for women who are in potential danger of being attacked. The woman possessing this device will press the panic button if in danger. An SMS containing the latitude and longitude coordinates will be sent to pre fed mobile numbers informing them of the danger and the location. The received coordinates can be viewed on google maps to determine the location of the woman and appropriate help can be provided. This concept was devised in the wake of serious crime against women in India and to help curb those crimes.

3.SCOPE OF PROJECT:

This proposed project deals with a quick responding, cost protection system for an individual and especially for women using which a woman in anguish can call for help just with the press of a button on this smart gadget. Self Defense module for women safety is like a Smart Watch for Women safety. It has the ability to help women with technologies that are embedded into a compact device. It has the potential to help women with technologies that are embedded. It is specially designed for women safety and protection. It has a control button that will be used by women to inform nearby police when they are in distress. This watch directly gets connected to the satellite through GPS when activated. Then the location is transferred through the GSM, it also contains a shock mechanism to produce non-lethal electric shock in emergency situations to deter the attacker.

4.PROBLEM STATEMENT:

According to the above figure, crime against women has increased every year. From 2012 to 2013, the cases increased from 2, 44,270 to 3.09,546. The cases increased from 2013 to 2014 and then decreased slightly in 2015. The Conviction rate was increased only by 0.7% from 2014 to 2015. The device proposed in this paper is based on a device developed to ensure child safety [3]. The child safety device is a wearable device through which parents can keep track of their children. The proposed device will work as an emergency device for women in distress.

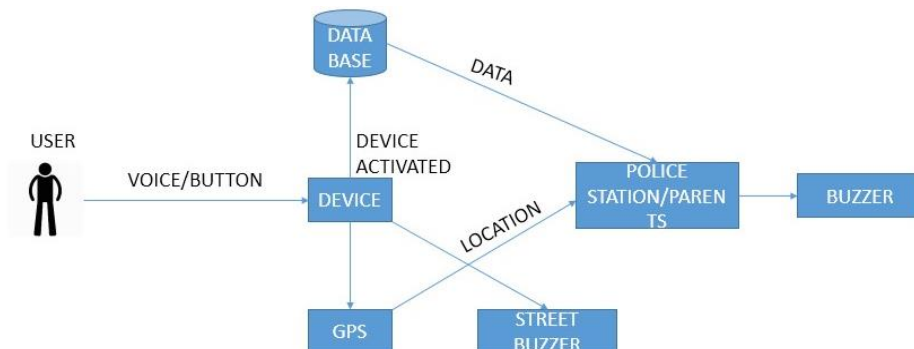


5.LITERATURE SURVEY:

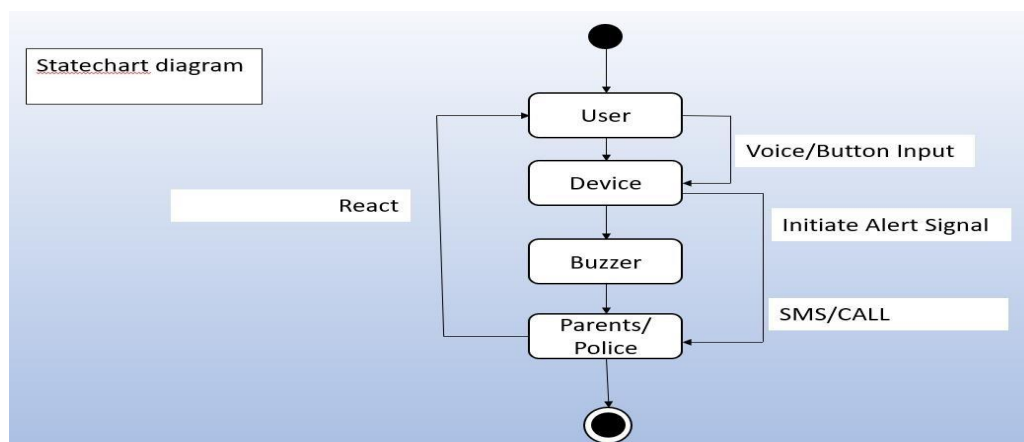
A. *Smart Watch for Women Security Based on IOT Concept 'WATCH ME'*

Today, in the current global scenario, Women were facing lot of challenges. We can hear the news of women harassments than their achievements. There are many existing apps and devices for women security via smart phones. Though the smart phones have increased rapidly, it is not possible to have the phone all the time in our hand to make a call or click on it, so here we introduced a new technique via smart watches. When a women or child wearing this 'watch me' is exposed to sexual or vulnerable attack, the sensor present in it detects the heart beat rate of a person which will be high at the moment by the secretion of epinephrine hormone from hpa axis and gets activated, this will not only provide a alarm sound to the attention of nearby people, it will automatically make an call to our registered contact and also through GPS/GSM it will detect the nearby police station and make an ring there so it will be helpful for police to arrive soon at the spot by tracking the GPS , such a system will lead to safer and better environment.

6.BLOCK DIAGRAM:



7 DATA FLOW DIAGRAM:



8 CONCLUSION:

The above report was on my module “Speech Recognition”, which comes under the project topic “A Human Safety Device, An Attaching Clip Using IOT”. This report tells about the Speech Recognition or Voice Recognition technic that we need to use in our project for converting speech to text. The report shows what technic are we using to do the speech recognition. For this purpose, we are using HMM Model, and we have seen that it is very compactible solution for the same. In this report we have studied how HMM works and the algorithm for it, its property, how to encode it and how to decode it. Hence, here I conclude with my module “Speech Recognition”.

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