

## Introduction

The intent of this project is to detect fraudulent calls. By detecting these fraudulent calls, we are able to protect our client's personal information and privacy. The effects of fraudulent calls include a significant loss of trust, money, and security. Recently there has been 15.4 million cases of fraudulent calls reported last year. As time keeps passing, the percentage of fraudulent calls keep increasing by increment 16 percent. With technology becoming more advanced, we run the risk of displaying our information to these criminals and benefit them in using our own information against us. This product will help our clients become more aware and confident in avoiding or encountering these situations. It will also help decrease the number of fraudulent calls each year.

## Design



Figure 1: The figure above shows an LCD screen connected to a Raspberry Pi 3 (RasPi3) which serves as a microcontroller or a mini computer. We will use the LCD screen to primarily insert our code into the RasPi3. Once implementing our code, we will utilize the LCD screen as a form of visual alert for the user.

## Prototype Functions



Client will be speaking in a microphone



The audio will be transcribed into a wave file and sent to IBM Watson



Once the file is sent to IBM Watson, it will be converted from Speech to Text



The text will be sent to a query and will be analyzed



If there is a match or pairing of unsafe wordings or commands, the client will be notified immediately

## Future Research

The future goals for this project is to develop new techniques that enables our prototype to be more efficient and secure. The next step to this project is to implement new features such as LED lights to draw attention and notify the client of the fraudulent call that is taking place. It will also be beneficial to make our project portable and easier to use for our clients.

## References

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## Acknowledgements

IoT-Enabled Smart Community Research Experiences for Undergraduates, University of California, Irvine; National Science Foundation; Office of Access and Inclusion, University of California, Irvine; Donald Bren School of Information and Computer Sciences, University of California, Irvine; Dean Leslie, University of California, Irvine; Dr. Sharnnia Artis

