Artificial Emotion Recognition

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Problem

Automated customer feedback systems can be frustrating to users thus allowing the inefficient system of direct human interaction to predominate the customer service field.

Emotion sensitive systems are necessary in order to handle the larger volume of customers to meet the increasing demand.

By managing customer interaction based on emotion, a human-like flow of communication can be established to meet customer needs.

Background Review

Some projects already exist in the emotion detection realm of machine learning such as real time emotion recognition through signals of speech and language.

Our goal is to improve upon the current models using emotion detections by creating easily accessible interfaces and systems to analyze a user’s state.

Approach

Part 1- Web Interface, this will involve:

- Developing a method of capturing audio
- Establishing a communication with ASR engine
- Developing method to receive hypothesis from ASR and passing it to Machine Learning Algorithms
- Displaying analyzed emotion as an output to the user

Leads: Jahidul Islam and Nathan Silva

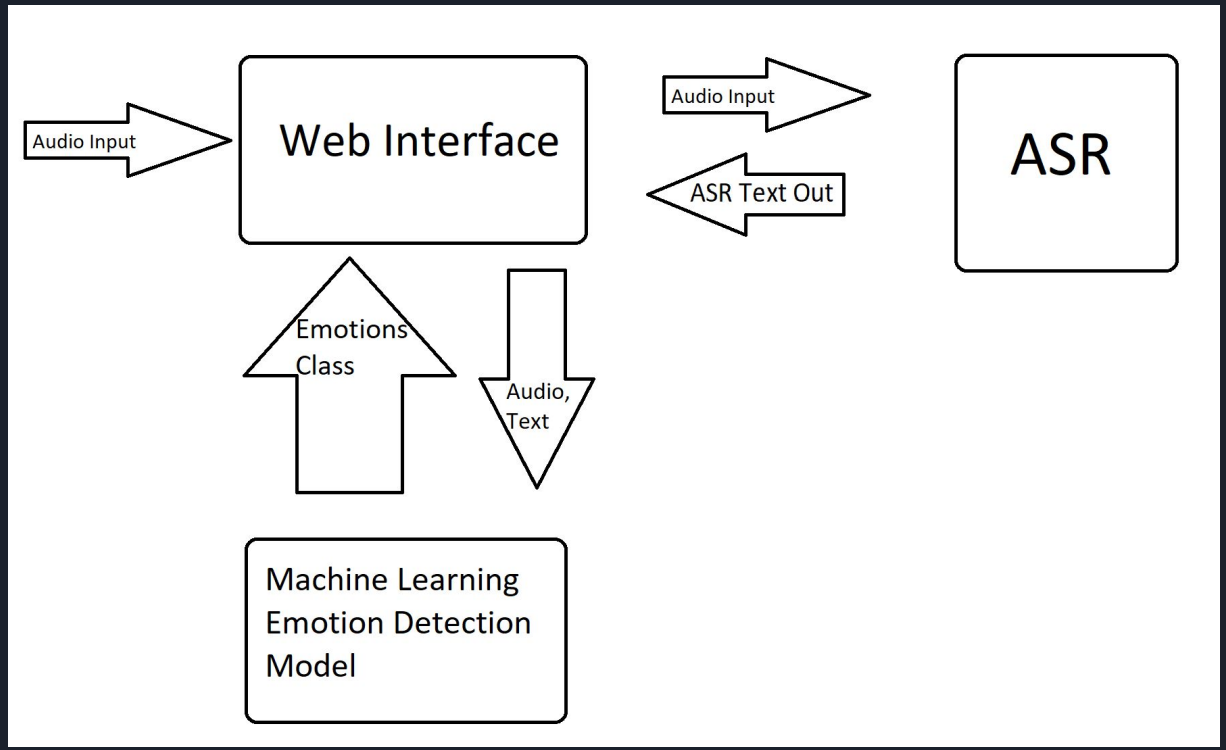
Approach Continued

Part 2 - Machine Learning, this will involve:

- Collecting a variety of applicable data
- Building models based on collected data that can be effectively analyzed to detect emotions
- Testing models to ensure proper emotional response
- Output to web interface

Leads: Andy Lee, Devvrat Patel, Shivani Sunil

Communications Schema



Objective

Our primary objective is to better understand and analyze user emotions to provide proper feedback and appropriate responses.

We will be detecting emotions in real time and processing the information from input via web interface and communication to ASR engine

Questions?