Meeting #2 with Client

MATLAB has built in functions to help us with the neural networks. We don’t have to implement the research papers, they are just a starting point.

Splitting audio files into bins was suggested.

A lot of speech recognition has to do with statistics. A lot of times, choices are determined by percent chances, with the most likely being chosen.

It was suggested that we could use inflection to break up syllables/words/etc.

Client suggested that we make software for recognizing phones only.

It was suggested that we normalize the speed/phone length of a speech file for better evaluation.

The metric that we evaluate our code for is error rate. We need to make a phone detection system that is as good, or better than the one being used in linux right now.

Plenty of room to innovate. If we come up with a good technique, we could be famous!

There are ways to record your own voice in MATLAB to test our program with. Or you just take a wav file of your voice and run it through.

We should assume that the audio could be in either a noisy or clean environment.

Client showed interest in recognizing phones by training a neural network.

The overall goal of the voice recognition project is to take the phones and build them up into potential phonyms/syllables/words, to eventually form a sentence.

Problems may arise with pronunciation and dialects, because then we may be required to have a different set of phones.

With machine learning, it is possible to understand dialects with one uniform set of phones, based on probability and the limited information known about the phones, as well the training involved while feeding a machine the right answers and sound files.

It was suggested that we add phones in the output that were very close to being chosen, instead of another.

Developers should look up information about ASR on Wikipedia. Bigram and Trigrams as well.

Each meeting has a different purpose. Right now, the developers just need to learn about the project and let the client know about their findings.