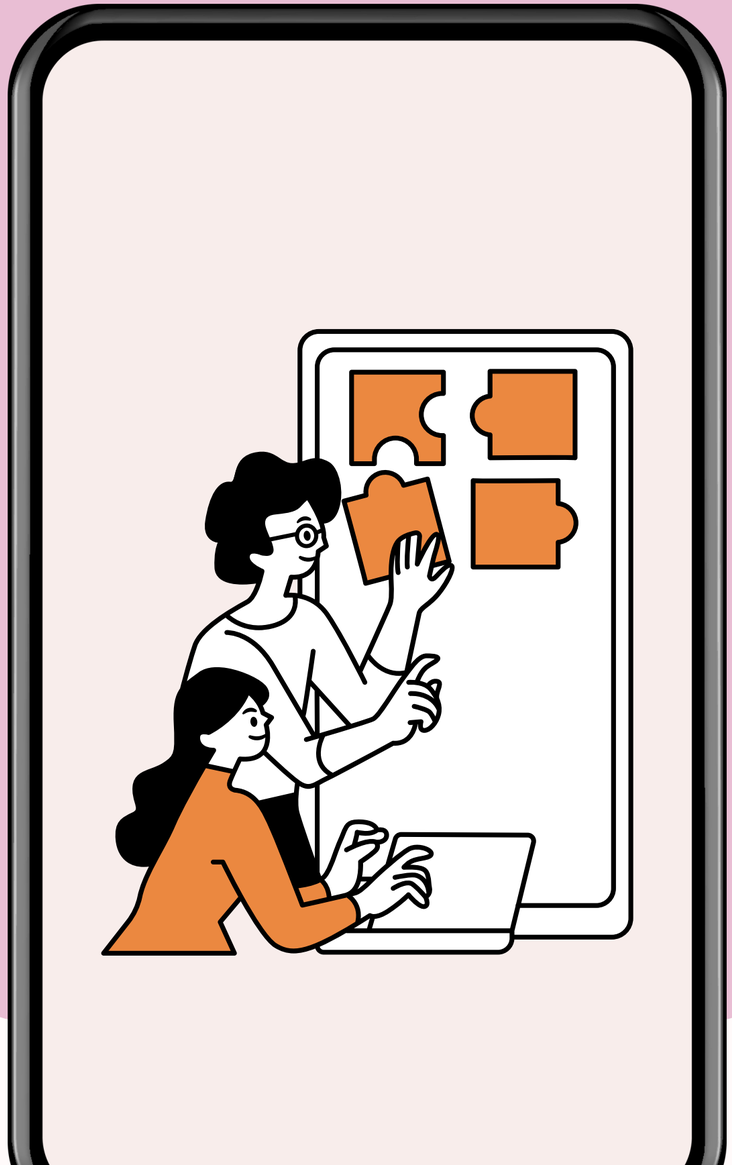
A Presentation by BinaryBois

ACCENT DETECTION

How does that work?



Recognition of accented speech using AI

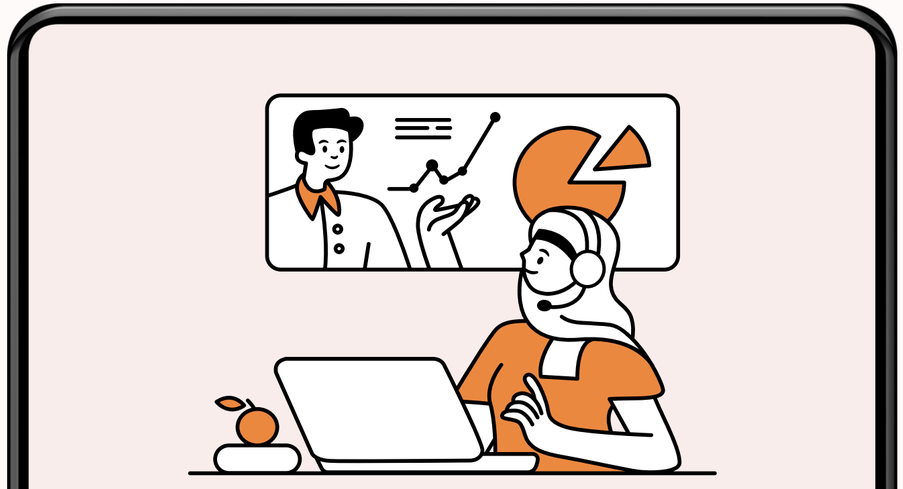
02

As speech recognition systems are used in ever more applications, it is crucial for the systems to be able to deal with accented speakers. We proposed a new approach that combines accent detection, accent discriminative acoustic features, acoustic adaptation and model selection for accented English speech recognition. Experimental results show that this approach can improve the recognition of accented speech.

03

Speech

Recognition of speech



04

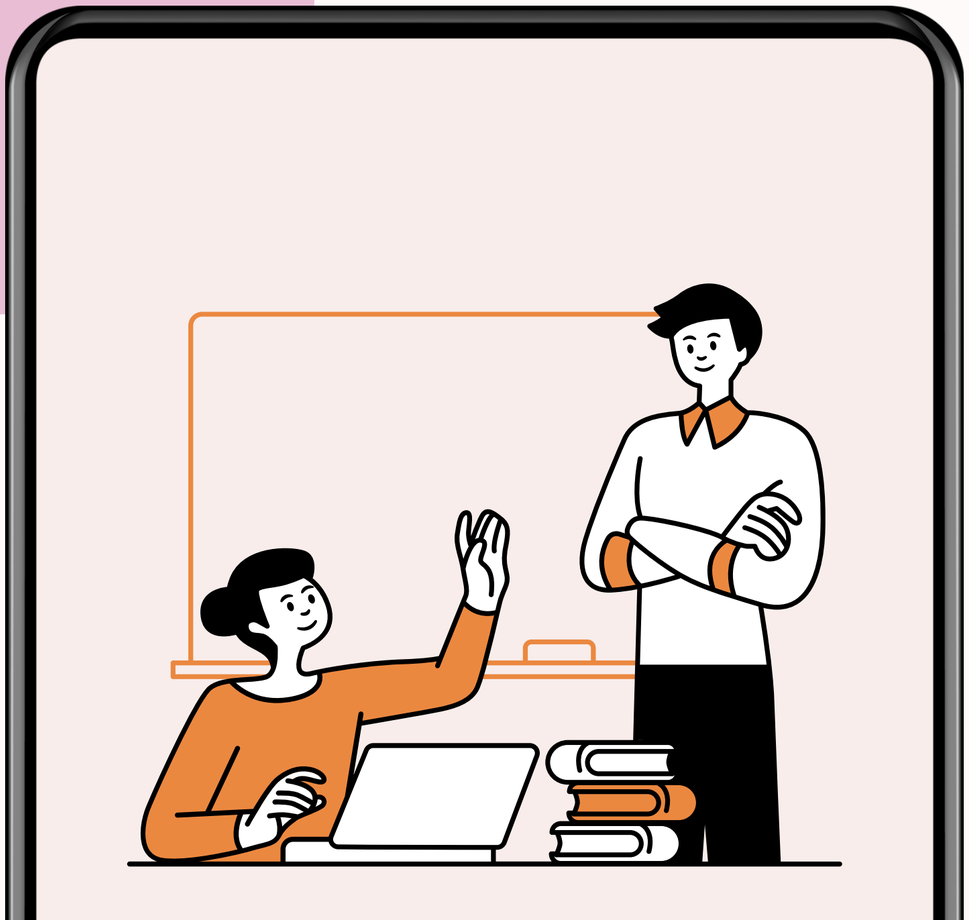
Overview

Using audio samples from given data set, we wanted to show that a deep neural network can classify the english accent of a speaker.

Implementation

05

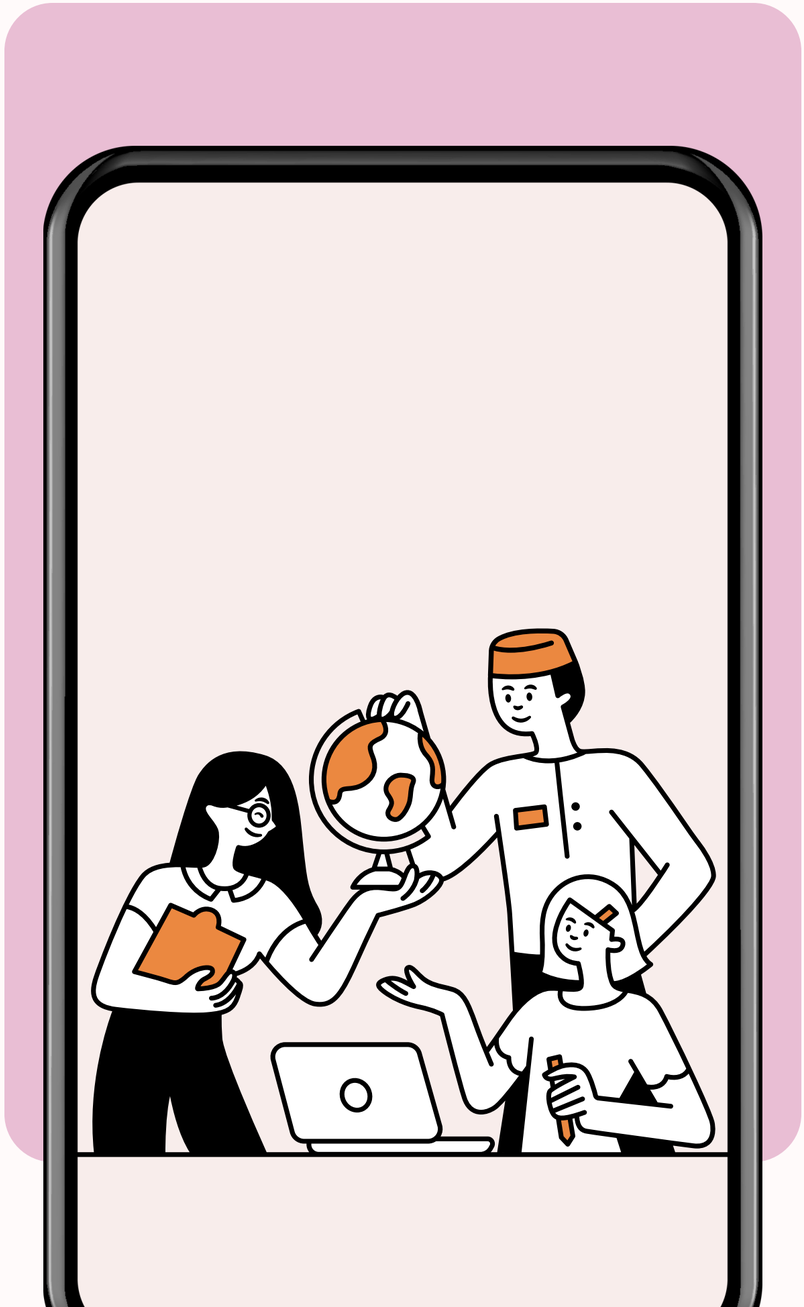
- Converted wav audio files into Mel Frequency Cepstral Coefficients graph.
- The MFCC was fed into a 2-Dimensional Convolutional Neural Network (CNN) to predict the native language class.



06

Editor & Environment Setup

- Install Miniconda or Anaconda
- Install PyCharm
- Install tensorflow, keras.



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