

ABSTRACT

Humans must have to interact with each other to fulfill their social needs and in avoidance from very early evolution, now speech is the primary mode of interaction between humans. This research` is about how speech signal produces from mouth organs and prime achievements to its recognition. It will cover basic models, types, relevant Issues, grounded approaches for Automatic Speech Recognition (ASR). Afterward there is an analysis of modern technologies (Matlab, Java and Microsoft) approaching toward the acoustic model implementations. Here is an implementation of Text to Speech (TTS) technology through an application. This application is developed with the help of Microsoft Speech API's that perform text to Speech Recognition and vice versa. In exception, developed software store values against vital characteristics of sound (Pitch, Quality and Intensity) on basis of which individual voice becomes distinguishable. These values are actually the data to train Back Propagation algorithm that will execute till acceptance level ($\text{desired error} \leq \text{actual error}$) to recognize speaker.