

ABSTRACT

Hidden Markov Model is a Markov chain where the output or function that describes the chances of the output symbols associated with the state and inter-state transition.

At the end of this final project has been designed and realized a system that can identify the human voice. Input is a human voice which contains the voice commands and the output is an execution of windows application. Voice identification system consists of pre-processing, feature extraction uses Mel Frequency Cepstral Coefficient (MFCC) and classification of voice, with the method of classification is Hidden Markov Model (HMM).

The results of the test can distinguish between the command with the best accuracy by 73% with the condition S/N of 33 dB and with S/N 20 dB, accuracy dropped to 42%.

Keyword: hidden markov model, HMM, MFCC, speech recognition