

## **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**