ABSTRACT

Biometric technology is a technology to identify individual based on traits unique biological. These characteristics are not easily recognizable by the computer, so we need a method that can truly represent the unique characteristics of a person. Voice recognition is example of biometric that is currently being developed by many experts. The human voice has different characteristics from each other.

At this final project, design of speaker recognition system will be present using feature extraction Mel-Frequency Cepstrum Coefficients (MFCC) and then the characteristics of MFCC will be processed using moving average. The results from moving average process will be used for input Neural Network. At this final project, back propagation neural network with decreasing learning rate will be present. Results from this recognition will be used for presence list.

The result for offline system is 81.33% with moving average coefficient that used 4. While accuracy for the real-time system only give 68% with an average time of introduction 1.04914133333s. Real time system gives small values for accuracy because there are many noise that enter to a system when recording.

Keys : biometric, *Mel-Frequency Cepstrum Coefficients (MFCC), back propagation, decreasing learning rate, moving average.*