ABSTRACT

In various research of speech signal processing has been developed. One of the interesting research to develop is a dialect identification. Information dialects of each region has unique characteristics in terms of the characteristics of speech signals. Dialect identification is done to get more information from someone through accent speech from various tribe in Indonesia and possibly further developed to determine a person's tribe.

In this Final Project, the speech of some tribes with the dialect of Javanese, Sundanese, Batak, Bali, Makassar recorded and processed using signal analysis in time domain and frequency that can be observed from spectrogram, then the feature extraction using the Mel Frequency Cepstrum Coefficients (MFCC) to know the essential characteristics of speech signals with different dialects. The results of feature extraction methods as input on the classification of the Self Organizing Map (SOM). There are two process in this simulation, non-real time and real time.

Results in the process of non-real time accuracy is 92.5% when using moving average coefficient is 10, the topology function is Randtop, distance function is dist and the Epoch is 1000. Accuracy in the process real time is 80% because several factors such as sensitivity of both hardware and software devices used in this final project.

Keyword : Dialect, Spectrogram, Mel Frequency Cepstrum Coefficients, Self Organizing Map