ABSTRACT

More various development phenomenon of searching technology (search engine) have been increasing nowadays, starting from word search engine, image search engine, web search engine and so on. Search engine itself is a computer program that will display the information based on the seeking content user's request, which the displayed-content has been already indexed and saved in the database.

Generally, search engine is an application that used to seek a data with text input typed by the keyboard. In this final project, I will try to make a search engine application with human singing voice and guitar sound. The classification that I used is Learning Vector Quantization Artificial Neural Network (ANN-LVQ) anda Euclidean Distance as speech recognition which will be compared from both methods.

The first thing to do is recording of human voice anda guitar sound, then the sound is processed digitally, followed by the sound extraction process using Mel Frequency Cepstral Coefficient (MFCC). The output is in the form of the title track that we are looking for. With this application is to be easier to find a song with 60% precision for human voice, 30% precision for guitar sound and 30% precision for the compound between human voice and guitar sound.

Key Words : *Search Engine*, *Learning Vector Quantization*, *Euclidean Distance*, *Mel Frequency Cepstral Coefficient*