ABSTRACT

Along with the times, music evolves quickly within a relatively short time. Music has a whole range of genres such as: Metal, Rock, Pop, and Dance. The music genre is a category of works of art, in this case especially music, to characterize and categorize the music is now available in various forms and sources. Automatically classifying musical genre can be very helpful in the development of retrieval system for audio data. Digital Signal Processing in the scope of audio signal is evolving rapidly, in terms to produce a system that works digitally. So we need a development of methods and algorithms that can accurately classify genre.

This final project used two types of methods: K-Nearest Neighbor method and Linear Discriminant Analysis. Where the establishment of the classification model K-Nearest Neighbor and Linear Discriminant Analysis collecting characteristics of the reference data to be training data during testing. Genre classification process begins with data acquisition that is choosing the song files will be classified into the genre of the song file. Furthermore, the process of preprocessing, retrieval feature that consists of 12 characteristic values, and the final classification process with comparison method K-Nearest Neighbor and Linear Discriminant Analysis to produce the kind of genre of the song file is selected and with the highest accuracy.

The experiment is testing to music genre of Blues, Dance, Metal, and Pop using the method of K-Nearest Neighbor and compared to Linear Discriminant Analysis method. The scenario of testing is executed with the amount of train data 50 and test data 50 in each genre, against the parameter of kind and Order of Filter and best parameter is obtained, that is Butterworth, Chebychev 1, Chebychev 2, and Elliptic filter kind with order 3,4 and 5. After the testing is executed towords the classification of 4 music genres, result is obtained with K-Nearest Neighbor 81,5% and 85% with Linear Discriminantt Analysis.

Keyword : *Classification, genre, music, K-Nearest Neighbor, Linear Discriminant Analysis.*