

## ABSTRACT

The music has a wide range of genres and examples they include Pop, Rock and Dance. Male gender difference generally look at the characteristics of the music and the type of instrument being played. Sometimes people are easy to distinguish a genre, but a system or machine is sometimes difficult to distinguish the genre of a music file. Digital signal processing on the audio signal rapidly evolving to produce a system that works automatically. So we have a development of methods and algorithms that can accurately classify genre. Several previous studies have used artificial neural networks, Support Vector Machine, Hidden Markov Model, and a continuous density Hidden Markov Model as a method of classification. In this thesis using the closest previous research that the use of K-neighbors simplest method.

In this thesis researched the genre classification method using K-Nearest Neighbor method is a simple classification method that does not need the training process. The establishment of classification models K-Nearest Neighbor only collect characteristic of reference data to be training data during testing. Where the genre classification process begins with choosing the song files will be classified genre of the song file. Furthermore, the process of preprocessing, retrieval feature that consists of 13 characteristic values, and the final classification process K-Nearest Neighbor to produce the kind of genre of the selected song file.

This experiment is testing of the genre classification method using K-Nearest Neighbor accuracy using the parameters calculated from test data are correctly classified to the total test data. Of test scenarios against parameter type and parameter obtained Filter Order the best are the type II Chebyshev filter of order 6. After testing the classification 3 genre song is pop, rock, and dance, the highest accuracy was 72% for the amount of reference data 50 each the genre, the sheer number of test data 50 each genre, the value of  $k = 5$ , and the type of cosine distance

Keywords: Classification, genre of music, K-Nearest Neighbor