

ABSTRACT

Along with the times, music evolves quickly within a relatively short time. Music has a whole range of genres such as: Classical, Rock, Folk, Jazz, and Electronic. 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.

In this Final Project studied the methods of classification using Support Vector Machine. Support Vector Machine method is a simple classification method. Establishment of classification models Support Vector Machine to collect characteristic of training data or reference data to be training data during testing. Where the genre classification process begins with choosing the song files will be classified its genre, then performed the process of preprocessing, retrieval characteristics by using feature extraction, and final classification process Support Vector Machine to produce the kind of genre of the selected song file.

This experiment is testing of the genre classification method using Support Vector Machine, From test scenarios for the amount of reference data 50 each genre, the number of test data 50 each genre, against the parameter type and the Order Filter obtain the best parameters that type Butterworth filter with order 3. After testing the classification 5 genres songs are Classical, Country, Jazz, Reggae and Rock the highest accuracy was 85,6% with SVM OAA and 86,4% with SVM OAO using the parameter SVM type of kernel polynomial, the value of kerneloption=1, $C = 10$ and $\epsilon = 1e^{-1}$.

Keywords: Classification, genre, music, Support Vector Machine.