

ABSTRACT

Musical genres are one of digital music data decided by human to be categorized by the common characteristics shared by its members. These characteristics typically are related to the frequency content, rhythmic structure, instrumentations, and also the harmony content itself. Genre hierarchies will be so useful to structure the large collections of music that now available freely on the Web. Currently musical annotation is performed manually. Automatic musical genre classifications can replace the human user in this process so that this kind of classification will not be relative anymore and can be classified by its standardization.

In this final project, the input is sound file in .wav format with 30-second duration, with two ways of feature extractions from two kinds of different references, based on the frequency contents and the timbral texture. The recognition method which is being used is SOMs Neural Network.

Tests are done by using two ways of feature extraction for each song. The most accurate result is from the first feature extraction, which is frequency content method. Overall, the system accuracy is 61,62 % with average computation time of 9-12 seconds per song.

Keyword: Feature Extractions, Audio Classification, Musical Genre Classifications, SOMs