

ABSTRACT

Genre is one form of category usually used to categorize art forms, one of which is music. Just like music, musical genre has and keep growing as more and more music are created as the time goes. Many characteristics of music that can be used to categorize them, such as the style, the instruments, language, lyrics, place of origin, etc., even the features of the music itself, such as the music's rhythm, tymbre, melody, pitch, and the pattern of it's audio signal.

To facilitate genre based music classification, many methods have been proposed to facilitate automatization of music classification task, such as using SVM (Support Vector Machine) methods, K – Nearest Neighbor (KNN) methods, Naive Bayes methods, even Deep Learning methods has been proposed, such as Convolutional Neural Network (CNN), and Recurrent Neural Network (RNN),

Convolutional Neural Network (CNN) usually used to process image files, but CNN can also be used to process audio file by generating *Mel-frequency cepstral coefficients (MFCC)* of the file and CNN will scan the *MFCC* to learn the pattern of the music's genre.

This method was chosen in the hope that by using CNN would yield more accurate and more consistent prediction results compared using other kinds of methods.

Keywords: Genre, classification, CNN (Convolutional Neural Network), *Mel-frequency cepstral coefficients (MFCC)*, Musical Features, Fast Fourier Transform (FFT)