

Abstract

Instrument is a device that creates or adapt for the purpose of making music. In principle, any object that produces sound can be useful as an instrument. The sound produced by an instrument has a different tone as well as when it played with the color of a particular sound. Music genres are categorical labels created by humans to characterize the piece of music, where instruments and genres of music are part of a song. This classification aims to separate the instruments and genres of music automatically, if we see the development of digital music which is rapidly increasing.

The introduction of instruments and genres of music is divided into three phases, namely frame preparation phase, feature extraction, and classification phases of music. In feature extraction phase, what is done is to take the characteristic features of music files. This feature will then become the basis for classification. This final assignment uses AdaBoost method for the introduction of instruments and musical genres. AdaBoost able to recognize types of instruments based on their respective genres. That is because AdaBoost trains the input signal by combining weak classifiers to get a strong classifier model. Based on the results of the tests performed on this final project, obtained the biggest akurasi in all four combinations of characteristic features, with iterations = 100, and the amount of training data = 72 samples.

Keywords: AdaBoost, instrument, genre, classification.