ABSTRACT

Music is series of tone which can be enjoyed by all people. Along the development

era, many music listeners want to learn how to play music instruments, either single tones

or chords. But in studying it, a lot of beginners confused in determining chords in a song.

Therefore, the application is necessary to helps in learn it.

In this Final Project, designed a system that can determining right chords in the songs.

It is done by detecting single tone which is entered and match the result of detection with

database to determine appropriate chord. This system is using Harmonic-FFT and JST

Backpropagation methods. Harmonic-FFT is use to extract feature (audio file) dan JST

Backpropagation use to identify or classify the input.

Average of the accuracy percentage of the test results obtained in this system is

61.49%. With most good percentage of 78.57% was obtained in the song Aura with

distance 4. While the results of the MOS, the best value was 3.50 in the song Clementine

with distance 3.

Keywords: Real-Time, Chord, Harmonic-FFT, JST Backpropagation

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