

ABSTRACT

In previous research has designed the analysis and simulation of song title classification based on human humming. However, the system still has the limitation to add song data to the database where the song data to be stored in the database, which verse and reff of each song, must be separated beforehand between all parts of its verse and reff manually. In this way, if desired addition of large amount of song data into the database will take a long time.

In this final project, a simulation system was designed to determine the second and third parts of the song reff by first determining the position of the first part of the song. The system is designed by using the whole song file as input which is then extracted feature using Discrete Wavelet Transform and Fast Fourier Transform methods and then matching using autocorrelation to the first part of the song based on the pattern of input to determine the second and third reff of a song automatically.

After testing by giving several different scenarios on the system designed then obtained some accuracy results. Testing is done using the frame size of window 100ms, 200ms, 500ms, 1000ms, 1250ms, 1500ms, 1750ms and 2000ms. From the test results of 50 songs performed, the system got the best results on the size of the frame window 1000ms with an accuracy of 96%, while the 2000ms frame size produces the best computation time of 4.2 seconds.

Keywords: Separating Reff, Discrete Wavelet Transform, Fast Fourier Transform.