

ABSTRACT

Song is a musical arrangement of same sequence. Song is also an art that depicts human thoughts and feelings through the beauty of the sound. Sometimes we sing a song, but not knowing the verse and the refrain. This system is about to determine the position of the first verse and the reff to be added to database. Databases consist of 25 pieces of verse and reff from the songs that processed manually. However, this process take a long time because researcher must determine when the verse and the reff beginning begins and ends. This thing will become a problem if number of database of verse and reff being added with new data, so further research is required to perform the separation of verse and the refrain automatically by analyzing signals from music files on mp3.

In this research will design the method of separation of verse and refrain using the calculation of the correlation between frames. The audio signal from an mp3 file is converted into a small frames on the process of framing, then frame will be entered to windowing processing before transformed using Discrete Cosine Transform (DCT). DCT transformation results will calculate the value of the correlation between frames to look for the pattern in common some collection of frames. From the correlation results obtained the same correlation patterns on the set of frame and then define the layout of the verse and the refrain. The last process is cutting of the verse and refrain in accordance with the location that was specified in the previous process. This method was applied in the simulation software matlab programming.

In this research obtained average of highest accuracy from hip hop genre , frame size 1 is 88,65% with computation time 111,2 seconds.

Keyword : mp3, verse and reff , Discrete Cosine Transform (DCT), correlation.