

ABSTRACT

Research about song title finder method with humming sound input need chorus part of the song to get unique pattern from a song. Chorus separation process still done manually so it will take a long time. This problem become the background, we need a method to finding the chorus position and separate it automatically by using audio signal processing.

In this research, author designing a chorus position finder method using 2-D Coefficient Correlation (KK2-D) and adding classification process K-Nearest Neighbor (K-NN). First process is inputting the audio file, next are preprocessing, framing, windowing, Discrete Cosine Transform (DCT) transform, KK2-D calculation, and K-NN classification. In this research, author used 25 songs from 5 different genres.

Test that have been done are analyzing frame size affection, window type affection, K- value from K-NN. Accuracy result from 25 songs is 95% with the best parameters are with 1 second frame, rectangular window type, K value of 5, and cosine distance. Average computation time for one song is 0.112 second.

Keywords: Audio signal, chorus, song, Discrete Cosine Transform (DCT)