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A Combined Feature Extraction and Thresholding Technique for Silence Removal in Percussive Sounds

Authors : B. Kishore Kumar, Pogula Rakesh, T. Kishore Kumar

Abstract : The music analysis is a part of the audio content analysis used to analyze the music by using the different features of audio signal. In music analysis, the first step is to divide the music signal to different sections based on the feature profiles of the music signal. In this paper, we present a music segmentation technique that will effectively segmentize the signal and thresholding technique to remove silence from the percussive sounds produced by percussive instruments, which uses two features of music, namely signal energy and spectral centroid. The proposed method impose thresholds on both the features which will vary depends on the music signal. Depends on the threshold, silence part is removed and the segmentation is done. The effectiveness of the proposed method is analyzed using MATLAB.

Keywords : percussive sounds, spectral centroid, spectral energy, silence removal, feature extraction
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