

Modulation Spectral Analysis of Static and Transitional Information of Cepstral and Spectral Features for Music Genre Classification

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Abstract

In this paper, we will propose an automatic music genre classification approach based on long-term modulation spectral analysis on the static and transitional information of spectral (OSC and MPEG-7 NASE) as well as cepstral (MFCC) features. An information fusion approach which integrates both feature level fusion and decision level combination is employed to improve the classification accuracy. Experiments conducted on the music database employed in the ISMIR2004 Audio Description Contest have shown that the proposed approach can achieve a classification accuracy of 87.79%, which is better than the winner of the contest.

Keyword : music genre classification; OSC; NASE; MFCC; Modulation Spectral Analysis