A NOVEL APPROACH TO MUSIC GENRE CLASSIFICATION

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Abstract

Recently, with the construction of digital music libraries, it is important to efficiently manage a large music database. It will be helpful to provide a content-based music genre classification system for managing a large database. Therefore, in this paper we will propose two novel music features, low-frequency energy ratio (LFER) and energy domain signal coding (EDSC), for music genre classification. The low-frequency energy ratio (LFER) extracts the energy of low-frequency components as the characteristics for a specific music type. The energy domain signal coding (EDSC) which characterizes the variations of energy or loudness tries to estimate the rhythmic information of a music track. Experiment results have shown that when the proposed two features are integrated into existing features such as Mel-frequency cepstral coefficients (MFCC) and octavebased spectral contrast feature (OSC) the classification accuracy will be improved as well.

Keyword：