

使用AC-3 特徵來進行電影資料的自動場景分類(Automatic Scene Classification  
of Movies Based on the AC-3 Features)

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摘要

As applications of multimedia are getting popular, content-based analysis of multimedia data has become of the most important research topics. Among various types of multimedia, movie plays an important role due to its rich semantics. DVD is the most popular storage format for digital movies. It uses MPEG-2 and AC-3 as its video and audio compression standard, respectively. Since the size of a movie is very large, understanding its cinematic structure will be very useful for analyzing its contents. In this paper, we propose a method to automatically classifying the scenes for a movie based on its AC-3 audio data. First, a movie is divided into a sequence of shots by a certain commercial software available.

Then, we extract the AC-3 audio features for each shot. With these AC-3 audio features and properties of scene types, we can effectively classify unknown scenes into a set of pre-defined scene types.

**關鍵字** : multimedia, scene analysis, MPEG-2, AC-3, content-based multimedia analysis, cinematic structures