Automatic Phrase Segmentation of MP3 Songs Based on the Technique of Breath Sound Detection

劉志俊

Computer Science & Information Engineering

Computer Science and Informatics

ccliu@chu.edu.tw

Abstract

A musical phrase is the basic unit for organizing and analyzing music signals. Thus an phrase segmentation technique is highly required and act as the first stage for automatic proccessing the music signals. As breath events usually occur at phrase boundaries, especially for opera and pop music. In this paper, we propose an approach to detect the phrase boundaries within an MP3 song based on the technique of breath sound detection. Experiments are performed and the results show that both the precision rate and the recall rate of the breath detection approach is much better than that of the approach based on musical preference rules for hummed MP3 songs.

Keyword：MP3, breath sound detection, phrase segmentation, phrase boundary detection, GTTM, musical preference rules.