

Musical Signal Transcription

Adina RUSU

Abstract

The goal of this work is to perform a transcription from the audio file to musical notes representation. For the analysis, the signal was divided into frames of variable length depending on the operation realized. The musical signal was processed using so-called traditional methods like energy envelope, the zero crossing rate, the Fourier transform, the spectrogram, the spectral centroid, the cepstrum, autocorrelation function, the average magnitude difference function and the linear predictive coding, all these bringing important characteristics of the signals. In what concerns music transcription, the most important constituent parts are the pitch extraction, onset detection and notes duration. In order to achieve these, a set of scripts were developed using the Matlab program package.