

ABSTRACT

PITCH DETECTION OF SPEECH SIGNALS

Pitch detection of speech signals finds numerous
5 applications in karaoke, voice recognition and scoring
applications. While most of the existing techniques rely on
time domain methods, the invention utilises frequency domain
methods. There is provided a method and system for
determining the pitch of speech from a speech signal; the
10 method including the steps of: producing or obtaining the
speech signal; distinguishing the speech signal into voiced,
unvoiced or silence sections using speech signal energy
levels; applying a Fourier Transform to the speech signal
and obtaining speech signal parameters; determining peaks of
15 the Fourier transformed speech signal; tracking the speech
signal parameters of the determined peaks to select
partials; and, determining the pitch from the selected
partials using a two-way mismatch error calculation.