

Abstract

Speech segmentation plays an important role in speech recognition in reducing the requirement for large memory and in minimizing the computation complexity in large vocabulary continuous speech recognition systems. In general, there are two kinds of segmentation. One is phonemic unit segmentation, which segments speech into fonemes based on the features of the phonemes. The other is syllabic unit segmentation.

In general, most of the approaches are based on the linguistic information used to segment the speech data. A new automatic speech segmentation procedure, called the Blind Method speech segmentation, is presented. This procedure allows a speech sample to be segmented into phonemic units without the knowledge of any linguistic information. Hence, this procedure involves finding the optimal number of fonemic unit segments in the given speech sample, before locating the segment boundaries.

Keywords: speech segmentation, phonemic unit, syllabic unit, optimal number segmen