Abstract Details

Title: Phonemes based Speech Word Segmentation using K-Means

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Abstract: Phoneme Speech segmentation is an important task in more speech sound processing applications. In this work uses k-mean algorithm to segment speech word sound to its phonemes .We are run k-means to separate between vowel regions and another the consonant regions in the input word signal. Then the segments points between vowel phoneme and consonant phonemes can be determined, and each phoneme can extracted easily. We are measure the performance of k-means by using different data type of waveform of word: Time domain, FFT, and wavelet transformation. We apply our system on 100 different words, then the accuracy of determine succeed segment points is 80.33%

Keywords: Audio segmentation, Automatic Speech Segmentation, Clustering, K-Means Algorithm.