Abstract

The goal of this paper is to create an Arabic Speech Recognition System, and apply it to a speech of an unknown words. The system has been developed for introducing a unique technique making interaction of human with a computer for natural language processing. In this paper 100 Arabic samples were recorded through a microphone and MFCC features of speech sample were calculated, Vector Quantization for mapping large feature vectors to finite cluster codewords, build trained codebook model for each word and VQLBG with Euclidean Distances used for recognition word according to distortions associated with features. This system provides a high accuracy in case of Arabic speech words.

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Index Terms

Computer Science  Signal Processing

Keywords

Arabic Speech Recognition System, MFCC, Codebook, VQLBG and Euclidean Distances Algorithms.