ABSTRACT

Modeling signal model for speech recognition is challenging task. It gives us great deal of information about problem being modeled. Speech recognition systems generally assume that the speech signal is a realization of some message encoded as a sequence of one or more symbols. These symbols called speech features (sequence of observed speech vectors). In HMM based speech recognition, it is assumed that the sequence of observed speech vectors corresponding to each word, represented by a speech model called Markov model. In this final project, speech features analyzed with MFCC (Mel-Frequency Cepstral Coefficient), and Viterbi algorithm is used to find the best path of symbols sequence corresponding to a word and return it as recognition result.

Key words: feature, MFCC, HMM, Viterbi algorithm