Speaker Recognition System using Gaussian Mixture Model

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Abstract

In this paper, features for text-independent speaker recognition has been evaluated. Speaker identification from a set of templates and analyzing speaker recognition rate by extracting several key features like Mel Frequency Cepstral Coefficients [MFCC] from the speech signals of those persons by using the process of feature extraction using MATLAB2013. These features are effectively captured using feature matching technique like Gaussian Mixture Model [GMM], with varying mixture components of mixture model and the analyzing its effect on recognition rate. Improve the speaker recognition rate by varying the input parameters of the classifier. The experiments are evaluated on TIMIT Database effectively for a speech signal sampled at 16kHz.

References


Index Terms

Computer Science

Signal Processing

Keywords

Gaussian Mixture Model [GMM] , Mel Frequency Cepstral Coefficients [MFCC], Speaker Recognition rate.