Abstract

Speaker recognition is a process where a person is recognized on the basis of his/her voice signals. In this paper we provide a brief overview for evolution of pattern classification technique used in speaker recognition. Also discussed propose process to modeling a speaker recognition system, which include pre-processing phase, feature extraction phase and pattern classification phase. Linear Prediction Cepstrum Coefficient (LPCC) and Mel Frequency
Cepstrum Coefficient (MFCC) are used as the features for text dependent speaker recognition in this system and the experiments compare the recognition rate of LPCC, MFCC or a combination of LPCC and MFCC through using Vector Quantization (VQ) and Dynamic Time Warping (DTW) to recognize a speaker's identity. It proves that the combination of LPCC and MFCC has a higher recognition rate.

References


Index Terms

Computer Science

Pattern Recognition

Keywords

Speaker Recognition  LPCC  MFCC  VQ  DTW