Abstract

In this paper, speaker identification system based on the wavelet transform is introduced. The proposed system identifies the speakers by their acoustic characteristics in speech signal of speakers. In this system, pre-processing of speech signal is used to remove silent part of speech signal. Discrete Wavelet Transform is used to decompose signal at two levels. DWT based Mel frequency cepstral coefficients (MFCC) and Traditional MFCC are used as a feature for speaker identification system. The similarity between the extracted features and set of reference features is calculated by Vector Quantization to determine speaker identity. TIMIT Database of different 15 speakers is used.

References

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Speaker Identification System using Wavelet Transform and VQ modeling Technique


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Index Terms

Computer Science     Signal Processing
Keywords

Speaker Identification System  Feature Extraction  Discrete Wavelet Transform
MFCC
Vector Quantization.