Abstract

Automatic Speaker Recognition technology has recently been implemented in large number of commercial areas successfully. Speaker recognition is being used in voice based biometrics; voice controlled appliances, security control for confidential information, remote access to computers and many more interesting areas. This paper introduces text dependent systems that have been trained for a particular user. All speaker recognition systems contain two main modules: feature extraction and feature matching. Here, we have used MFCC technique for feature extraction and Vector Quantization model for feature vectors modeling. There are mainly two important tasks to be performed in speaker recognition process: one is training phase and other is testing phase. During the training phase, the input speech features are extracted and the corresponding feature vectors are modeled using modeling techniques. These feature vectors are stored as reference templates. They are then compared with the entered speech signals during the testing phase and thus how helps in identification of voice.

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Speaker Recognition using MFCC front end analysis and VQ Modeling Technique for Hindi words using MATLAB

Nitisha Garg, Ashu Bansal, Anu Taneja

Understanding Speech Recognition System and Recognizing Hindi Language Numerals Using MATLAB

S K Hasnain

Recognizing Spoken Urdu Numbers Using Fourier Descriptor and Neural Networks with Matlab

Muhammad Salman Haleem

Voice Controlled Automation System

Y. Linde, A. Buzo, and R. M. Gray.

An algorithm for vector quantizer design

Mohammad A. M. Abu Shariah, Raja N. Ainon, Roziati Zainuddin, Othman O. Khalifa

Human Computer Interaction Using Isolated-Words Speech Recognition Technology

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IMPROVE AUDIO REPRESENTATION BY USING FEATURE STRUCTURE PATTERNS

Talal Bin Amin, Iftekhar Mahmood

Speech recognition using Dynamic Time warping

Ali Zulfiqar, Aslam Muhammad, Martinez Enriquez A. M

a speaker identification system using MFCC Features with VQ Technique

Md Afzal Hossan

Automatic Speaker Recognition Dynamic Feature Identification and Classification using Distributed Discrete Cosine Transform Based Mel Frequency Cepstral Coefficients and Fuzzy Vector Quantization

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Index Terms

Computer Science

Signal Processing

Keywords
Automatic Speaker Recognition  Mfcc: Mel-frequency Cepstrum Coefficients  Vq: Vector Quantization

Feature Extraction

Feature Matching