Abstract

Speech processing is developed as one of the paramount requisition region of digital signal processing. Different fields for research in speech processing are speech recognition, speaker identification, speech bland, speech coding etc. The objective of Speaker Independent Speech Recognition is to concentrate, describe and distinguish information about speech signal and methodology towards creating the speaker free speech recognition system. Extracted information will be valuable for the directing and working different electronic contraptions and hardware through the human voice proficiently. Feature extraction is the first venture for speech recognition. Numerous algorithms are recommended / created by the scientists for feature extraction. In this work, the cubic-log compression in Mel-Frequency Cepstrum Coefficient (MFCC) feature extraction system is utilized to concentrate the characteristics from speech sign for outlining a speaker independent speaker recognition system. Extracted features are used to train and test this system with the help of Vector Quantization approach.

References

Education (Singapore).
- Karam, Zahi N., and Campbell W. M. A new Kernel for SVM MIIR based Speaker recognition. MIT Lincoln Laboratory, Lexington, MA, USA.
Speaker Independent Speech Recognition using MFCC with Cubic-Log Compression and VQ Analysis


Index Terms

Computer Science

Signal Processing

Keywords

Speech Recognition  Speaker Independent Speech Recognition  MFCC  Mel Frequency Cepstrum Coefficient

Vector Quantization

VQ Approach

Cubic-Log Compression.