Abstract

Speech compression is one of the leading vicinity of digital signal processing that spotlight on dipping the bit rate of speech signals for transmission and storage devoid of considerable loss of quality. In past decades many speech coding techniques have been proposed for speech analysis. This paper attempts to assess and compare two compression techniques on speech signals. To execute this idea we have chosen two low bit rate and widely used speech analysis methods called VELP and MELP. The performances of both are evaluated by performing objective quality tests including PESQ, IS and CEP. Similar speech files are tested with both coders. The objective assessments show that at low bit rate the MELP shows better performance as compared to VELP.
Comparative Analysis of Speech Compression Algorithms with Perceptual and LP based Quality Evaluations

- Enqvist, P., Karlsson, J., "Minimal Itakura-Saito distance and covariance..."

Index Terms

Computer Science

Signal Processing

Keywords

MELP  VELP  PESQ  IS  Cepstrum distance  MOS