Abstract
We propose an effective feature extraction technique for obtaining essential time-frequency information from the linear prediction (LP) residual signal, which are closely related to the glottal vibration of individual speaker. With pitch synchronous analysis, wavelet transform is applied to every two pitch cycles of the LP residual signal to generate a new feature vector, called Wavelet Based Feature extraction (WBFE), which provides additional speaker discriminative power to the commonly used linear predictive Cepstral coefficients (LPC). WBFE outperforms the LPCs.
coefficients. In this paper, we have demonstrated the effectiveness of using vocal source features to supplement vocal tract features for improved speaker verification and the verification results are displayed in the MATLAB.

Reference

- Tavel, P. 2007 Modeling and Simulation Design. AK Peters Ltd.

Index Terms

Computer Science
Information Technology

Key words

LP residual
WBFE
LPC