Abstract

It is possible to identify voice disorders using certain features of speech signals. A complementary technique could be acoustic analysis of the speech signal, which is shown to be a potentially useful tool to detect voice diseases[2]. The focus of this study is to compare the performances of mel-frequency cepstral coefficients (MFCC) and linear predictive cepstral coefficients (LPCC) features in the detection of vocal fold pathology and also bring out scale to
measure severity of the disease. The speech processing algorithm proposed estimates features necessary to formulate a stochastic model to characterize healthy and pathology conditions from speech recordings. Two different set of features such as MFCC and LPCC are extracted from acoustic analysis of voiced speech of normal and pathological subjects. A linear discriminant analysis (LDA) classifier is designed and the classification results have been reported.

References

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Index Terms

Computer Science Electronic Design And Signal Processing
Keywords
Mel Frequency Cepstral Coefficients  Linear Predictive Cepstral Coefficients  Linear Discriminant Analysis