Abstract

Separating one source from a mixture of sources is a problem, normally observed with parties. Here the sources may be all speech signals or one is speech and the other is music. To have a better understanding of speech, one needs to separate the actual signal. This can be done by using blind source separation technique. It is hard to extract an interesting conversation from the background noisy crowd. Speech mixture is despoiled by the surrounding noise, interferences and additional speakers. Here an attempt for solving this separation problem, i.e., extracting one or more speech signals from a speech mixture. To eliminate or reduce the noise in speech signal in speech mixture is done by using wavelets. The wavelet output speech mixture processes for source separation by using, two techniques ICA and binary T-F masking. This separation technique is likewise applicable to segregate speech signal under reverberant conditions.

References

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Index Terms

Computer Science

Signal Processing

Keywords

Discrete time wavelets transform (DWT) Independent component analysis (ICA) and Time frequency masking (T-F Masking).