

عنوان مقاله:

A New Wavelet Thresholding Method for Speech Enhancement Based on Symmetric Kullback-Leibler Divergence

محل انتشار:

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خلاصه مقاله:

Performance of wavelet thresholding methods for speech enhancement is dependent on estimating an exact threshold value in the wavelet sub-bands. In this paper, we propose a new method for more exact estimating the threshold value. We proposed to determine the threshold value based on the symmetric Kullback-Leibler divergence between the probability distributions of noisy speech and noise wavelet coefficients. In the next step, we improved this value using segmental SNR. We used some of TIMIT utterances to assess the performance of the proposed threshold. The algorithm is evaluated using the PESQ score and the SNR improvement. In average, we obtain 2db SNR improvement and a PESQ score increase up to 0.7 in comparison to the conventional wavelet thresholding approaches.

کلمات کلیدی:

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