

Adaptive Combination of Linear NLMS Filters and its Application in Acoustic System Identification

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Abstract

The paper proposes a linear system identification method that uses a combination of adaptive filters, proved to be a flexible method to deal with the compromises that arise from adaptive filters processing. Experiments were made for a white Gaussian distributed noise and a non-stationary audio input signal. The employed adaptive filters were variants of the Normalized Least Mean Square (NLMS) algorithm. Performances have been evaluated in terms of Echo Return Loss Enhancement parameter. A comparison was made between improvements attained by the proposed method and two sub-band decomposition model. The advantages of the proposed method were outlined.

Biography

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Manuscript received on May 14, revised on May 26, 2012