ADAPTIVE NOISE CANCELLATION BY USING LMS METHOD

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ABSTRACT

This paper describes the concept of adaptive noise cancelling,an alternative method of estimating signals corrupted by additive noise or interference.The method uses a "primary" input containing the corrupted signal and a "reference" input containing noise correlated in some unknown way the primary noise.The reference input is adaptively filtered and subtracted from the primary input to obtain the signal estimate. A desired signal corrupted by an additive noise can often be recovered by an adaptive noise canceller using the least mean squares (LMS) algorithm. Computer simulations for all the cases are carried out using matlab software and experimental resultsare presented that illustrate the usefulness of adaptive noise cancelling technique.

KEYWORDS: Adaptive Noise Canceller, LMS Algorithm, Noise Reduction