

# ADAPTIVE FILTERING TECHNIQUE FOR NOISE CANCELLATION.

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## Abstract

Noise is always present in electrical systems. The presence of noise superimposed on a signal limits the receiver's ability to correctly identify the intended signal and thereby limits the rate of information transmission. Good engineering design can eliminate much of the noise or its undesirable effect through filtering, shielding, the choice of modulation, and the selection of an optimum receiver site. This paper describes the Least Mean Squares (LMS) adaptive filtering algorithm. The algorithm was implemented in Mat lab and was tested for noise cancellation in speech signals.

Keywords: Noise cancellation, Adaptive filtering, Least Mean Square

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