

IMPLEMENTATION OF BLOCK LEAST MEAN SQUARE ADAPTIVE ALGORITHM FOR EFFECTIVE NOISE CANCELLATION IN SPEECH SIGNAL

¹J. Jebastine, ²Dr. B. Sheela Rani,

¹Research Scholar, ²Vice-Chancellor & Dean, PG Studies and Research, Sathyabama University, Chennai.
E-mail: enochjeba@gmail.com

ABSTRACT

Noise cancellation is a common occurrence in today telecommunication systems. Adaptive filter is one of the most important areas in digital signal processing. This paper explores the removal of noise from noise corrupted audio speech signals. An adaptive FIR filter with BLMS algorithm is developed to cancel the noise from the audio speech signal. The BLMS algorithm which is one of the most efficient criteria for determining the values of the adaptive noise cancellation coefficients are very important in communication systems. The major advantage of the proposed system is its ease of implementation and fast convergence. The proposed algorithm is applied to noise canceling problem of long distance communication channel. The algorithm was implemented in Mat lab and was tested for noise cancellation in speech signals.

Keywords:-Noise cancellation, BLMS Adaptive Algorithm, Simulink Model.