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## IMPLEMENTATION OF LINEAR CONVOLUTION USING VEDIC ALGORITHM- A MATLAB BASED APPROACH

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### Abstract

Linear convolution is the key operation in most digital signal processing applications. In this paper, discrete linear convolution of two finite length sequences using vedic algorithm is presented. The proposed algorithm design uses modified approach by replacing the conventional multiplier by vedic multiplier. The algorithm is designed and implemented by using MATLAB. This method is efficient in terms of computational speed.

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Key Words : *Linear convolution, Vedic algorithm, UrdhvaTiryakbhyam sutra, Digital Signal Processing.*

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