Abstract

In this paper, double wavelet series of a signal \( f \) of two variables \( t_1 \) and \( t_2 \) using Haar Scaling function \( \Phi(t_1, t_2) = \varphi(t_1) \varphi(t_2) \) and Haar Wavelet function \( \Psi(t_1, t_2) = \psi(t_1/2) \psi(t_2/2) \)
1) $\psi(t)$ has been introduced and it has been verified by a number of examples. Several properties of this signal and its image have been studied. The significant result of this paper are the decomposition and reconstruction of signals of a single variable $t$

and signals of two variables $t$ and $t$

using Haar Scaling signal as well as Haar Wavelets.

**References**


**Index Terms**

Computer Science Image Processing

**Keywords**

Haar Wavelet, Signal Processing, Image Processing, Double Wavelet Series, Signals of Lip Class