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 $\Psi(\ t_1,\ t_2) = \psi(t_1)\psi(t_2)$.
\[ \psi(t) \]

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