Abstract

In this paper, double wavelet series of a signal $f$ of two variables $t_1$ and $t_2$ using Haar Scaling function $\Phi(t_{1, t_2}) = \phi(t_1) \phi(t_2)$ and Haar Wavelet function $\Psi(t_{1, t_2}) = \psi(t_1 / 2, t_2 / 2)$. 
Haar Wavelet Expansions of Signals and their Applications in Image Processing

\( \psi(t) \) 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