

ONE TOPIC ON WAVELET ALGORITHM
BY USING ONE DIMENSIONAL HAAR WAVELETS

MAHMOUD AFSHARI

Abstract. In this paper we obtain an algorithm to compute a fast wavelet transform and use this algorithm to analyze and synthesize a signal or function f . We consider a sample point (t_j, s_j) that includes a value $s_j = f(t_j)$ at height s_j and abscissa (time or location) t_j , and apply wavelet decomposition by using shifts and dilations of the basic Haar transform. Some relationship between wavelet coefficients are investigated.

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Key words. Haar wavelets, fast wavelets, wavelet algorithm, estimation, discrete wavelet, multiresolution analysis.

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Persian Gulf University
Department of Mathematics and Statistics
Bushehr 7516913798, Iran
E-mail: afshar@pgu.ac.ir