

Concept Question 10-9: What is the difference between using the Haar wavelet transform and a set of bandpass filters?

The Haar wavelet transform implements differences and sums of successive values of the input signal, and then downsamples. This is a crude decomposition into lowpass and highpass components. Implementing this recursively performs a crude decomposition into a set of bandpass components. It trades frequency-domain selectivity into time locality, to pick up edges.