

MATH 416, Extra Project

Compare the performance of the Fast Fourier Transform and the Discrete Haar Wavelet Transform.

The comparison should be performed on 2 examples: a real life audio signal (that is a vector), and on a real life image. (Here "real life" refers to naturally generated signals, not the ones that you can produce with matlab.) Both transforms should be performed on each signal.

For the measure of success use the compression rate and $\|\cdot\|_2$ norm for estimating the difference of the compressed signal from the original.