Abstract

We implement image compression using various wavelet filter banks and measure performance with rate distortion characterizations. Various separable filter banks are chosen and compared. Coefficients in the subbands obtained by wavelet decomposition are quantized. The image is then reconstructed from the quantized coefficients, and distortion is measured. Three distortion measures are used: Entropy of reconstructed image, energy retained (ER) and redundancy.

Reference


Index Terms

Computer Science

Image Processing

Key words

Image compression

Wavelets

Entropy

Energy retained

Redundancy