Abstract

Multiresolution analysis is a design method for most of the practically relevant discrete wavelet transform. Multiresolution approaches provide a powerful tool for image processing. Combined 2-D and 1-D directional filter banks are used for the visual quality improvement and have higher PSNR than the predictable separable wavelet transform. Multiresolution image that makes image look good on all screen resolution. Multiresolution keeps each screen pixel filled with at least one image pixel, up to maximum resolution of the image. Here in addition being proposed multi wavelet transform that exploits the multiresolution image and can efficiently represent the sharp edges of the image. The development in this paper draws the results regarding the multi wavelets appear to excel at preserving high frequency content. In particular, multi wavelets better capture the sharp edges and geometric patterns that occur in images.

References

- P. P. Vaidyanathan, Multirate Systems and Filter Banks. Englewood Cliffs, NJ:

**Index Terms**

Computer Science  Image Processing

**Keywords**

Directional filter banks  2-D filter banks  multi wavelet transform.