Image Compression based on Scaling Functions And Wavelet Transformations

Abstract

The objective of this paper is to implement and evaluate the effectiveness of scaling functions and wavelet transformations in the field of image compression and decompression. The performance parameters like Peak Signal to Noise Ratio (PSNR), Mean Squared Error (MSE), and Compression Ratio (CR), SNR (Signal to Noise Ratio) are calculated based on the Matlab source code. The implemented model provides better PSNR, MSE, CR, SNR than the Basic 2D Discrete Cosine Transform.

References

- Adaptive Wavelet rendering by Ryan S. Overbeck, Columbia University, Craig Donnery Columbia University, Z. Ravi Ramamoorthy, University of California, Berkeley.
Index Terms

Computer Science  Image Processing

Keywords

Abstract  Introduction  Basic Construction of Scaling Concepts  Daubechies  Wavelets  Wavelet Transformation  Results and Discussion  Error Metrics  Conclusion
References.