Abstract

Uncompressed images occupy more memory and it contains redundant data. For storage and transmission efficiency compression is required. The purpose of image compression is to reduce the number of bits to represent in image while maintaining visual quality of images. In this paper we implement the Fast Fourier coefficient Transform with non overlapping 3 x 3, 9 x 9 and 27x 27 block sizes of the images. The purpose of the study is to reduce the original image into a small set of pixels by using the Fourier coefficients with this idea the compression is successfully implemented on various images, computed the Peak Signal Noise Ratio (PSNR) and Compression Ratio (CR) for the various images.

References

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Statistical Image Compression using Fast Fourier Coefficients

quantization schemes and JPEG standard for image compression, IEEE

Index Terms

Computer Science   Image Processing

Keywords

Fast Fourier Transform (FFT), Root Mean Square Error (RMSE), Compression Ratio (CR), Peak Signal Noise Ratio (PSNR), Image.