Abstract

Many methods are available for compression of an image file. Images are usually in the form of matrices and an uncompressed image uses a huge number of bytes for storage. Its applications in various fields are quality control, remote sensing, imaging science etc. The image compression methods which are popular on the transform based coding methods like Discrete Cosine Transform (DCT), Discrete Wavelet Transform (DWT) and fractals. However, these methods have drawbacks like low compression ratio and high encoding time. The proposed hybrid technique combines DCT and fractal quad tree decomposition with Huffman encoding of fixed threshold value for color images. The results for the proposed method are displayed and compared for performance parameters as compression ratio, encoding time, decoding time and PSNR.

References


14. Surekha R Gondkar, Girish V Attimarad, B. Chandrasekhar,’Comression of 2D image using 3D DCT”


Index Terms

Computer Science  Image Processing
Keywords

DCT, Fractal Quad tree, Huffman coding, Fractal Image Compression, Hybrid methodology