Addressing to high speed and low memory requirements the wavelet domain had made easier compression using SPIHT Set Partitioning in Hierarchical Tree (SPIHT) is quad tree structure. The proposed work intends to achieve higher rate in image compression. SPIHT works on Discrete Wavelet Transform, image is coded efficiently with few bits and originality of the source image is decoded exactly in the reconstructed image. Lifting Wavelet Transform gained quality in the decoding scheme and to save subband coding time. Scanning technique to decide threshold at every step of partitioning, to regain original features in the reconstructed image algorithm has given higher throughput compare other techniques. The results obtained has proved the algorithm is more efficient in data compression.

References

Wavelet Transform Analysis on Image Compression using SPIHT

1996, pp.243-250


Index Terms

Computer Science

Image Processing

Keywords
Discrete Cosine Transform (DCT), Discrete Wavelet Transform (DWT), Embedded Zero Tree wavelet (EZW), LWT, SPIHT.