Abstract

In this paper we have discussed compression and analysis of image using high resolution grid and SPIHT encoding technique. Firstly the original image is converted into low resolution (less size) image, then quantization and SPIHT encoding, techniques are applied to compress the image. To restore the original image, the compressed image is decompressed (dequantized & decoded) and interpolation techniques using high resolution grid (tukey window and PG algorithm) are applied to achieve high resolution decompressed image. The PSNR of the high resolution decompressed image is high compared to PSNR of low resolution original image. At last we found the compression ratio is directly proportional to PSNR.

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Index Terms

Computer Science

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Keywords

SPIHT  ROI Compression  MIC  Peak Signal to Noise Ratio (PSNR)  Compression Ratio (CR)  Tukey-wind
PG algorithm (Papoulis-Gerchberg method)