Abstract

The reconstructed images from JPEG compression produce noticeable image degradation near the block boundaries, in case of highly compressed images, because each block is transformed and quantized independently. The blocking effects are classified into three types of noises: staircase noise, grid noise and corner outlier out of which major thrust is laid on corner outlier in this paper. A post-processing algorithm is proposed to reduce the blocking artifacts of JPEG decompressed images. The proposed post-processing algorithm, which consists of three stages, reduces the blocking artifacts efficiently. A comparative study between the proposed algorithm and other post-processing algorithms based on various performance indices is made.

Reference

- B. Ramamurthi, A. Gersho, Nonlinear space-variant post-processing of block coded

Index Terms

Computer Science  Image Processing
Key words

Blocking artifact
JPEG

Compression
post-processing

adaptive Filters
PSNR
MSE
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