Abstract

In the recent years, use of Digital Image Communication has increased exponentially in the day to day activities. Joint Photographic Experts Group (JPEG) is the most widely used still image compression standard for bandwidth conservation. In this paper, it is proposed and critically studied a new set of JPEG Compression algorithms by combining Mean filtering, Median filtering, and Outlier detection algorithms and conventional JPEG DCT algorithm in a staged manner. This outlier based JPEG algorithm is giving exceptionally compression compared to conventional JPEG algorithm. Experiments are carried out with many standard still images. Algorithms developed in this paper, identified to be giving almost same Peak Signal-to-Noise Ratio (PSNR) as that of standard JPEG algorithm.

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Keywords
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