Abstract

People are sharing, transmitting and storing millions of images every day. To store images it may require huge data storage. The compression of images reduces the storage required to store images, also permits the faster transmission. Several works have been carried out in designing compression techniques that reduce image size with higher image quality. True color images take largest part in web pages, hence it is important to make control over image size and their quality to deliver fastest loading. This paper presents a new image compression technique CWS by cascading wavelet difference reduction (WDR) and singular value decomposition (SVD). In the proposed method, an input image is first compressed using WDR and then compressed using SVD. These two techniques are cascaded to boost the performance of WDR. The results are showing that the proposed compression is superior over the aforementioned compression techniques.

Index Terms

Computer Science  Information Sciences

Keywords

Lossy Image Compression, Singular Value Decomposition, Wavelet Difference Reduction, Cascading.