Comparative Study of DCT based Image Compression on Hexagonal and Conventional Square Pixel Images

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Abstract

Even though, the storage space and transmission bandwidth can be reduced by compression, it will reduce the image fidelity, especially when the images are compressed at lower bit rates. Discrete Cosine Transform (DCT) based compression is an effective way of compression in which good compression ratio without losing too much of information can be obtained. In this work a comparison of DCT based Image compression on hexagonal and rectangular sampling grid is performed. Mean Square Error and Peak Signal to Noise Ratio is considered for the performance analysis. Compression on hexagonal domain gives better results compared to compression on rectangular domain

References

Comparative Study of DCT based Image Compression on Hexagonal and Conventional Square Pixel Images.


Index Terms

Computer Science  Image Processing

Keywords

Image Resampling Hexagonal Image Alternate Pixel