Abstract

In this paper, a simple lossless image compression method based on a combination between bit-plane slicing and adaptive predictive coding is adopted for compressing natural and medical images. The idea basically utilized the spatial domain efficiently after discarding the lowest order bits namely, exploiting only the highest order bits in which the most significant bit corresponds to last layer7 used adaptive predictive coding, while the other layers used run length coding. The test results leads to high system performance in which higher compression ratio achieves for lossless system that characterized by guaranty fully reconstruction.

References

- Santanu, H., Debotosh, B., Mita, N. and Dipak, K. 2012. A Low Space Bit-Plane
Lossless Image Compression based on Predictive Coding and Bit Plane Slicing


Index Terms

Computer Science

Image Processing

Keywords

Image compression  lossless  lossy  predictive coding and bit plane slicing.