Abstract

During the past few decades the wavelet transform is more and more widely used in image and video compression. One of the well known progressive encodings in image compression is the "Embedded Zerotree wavelet" (EZW) encoding, which involves the wavelet transform. As of today the parallelization of the wavelet transform is abundantly investigated, So this work deals with the parallelization of the encoding part itself. The OPENMP programming model is used for implementing the parallel version. Both the sequential and parallel versions of EZW encoding are presented along with their performance.

References

- M. Antonini, M. Barlaud, P. Mathieu, I. Daubechies, Image coding using wavelet
Performance Improvement of EZW Encoding through Parallelization


Index Terms

Computer Science Security

Keywords

EZW parallelization bitplane coding progressive encoding zerotree dominant pass