Abstract

This paper proposes an improved wavelet with approximating function which is symmetric in nature is proposed for compression technique. Multi-application smart cards are fast replacing the conventional cards such as driving license, health insurance card, identity card, credit card with a single card. Thus, the amount of data stored in the smart card is high, requiring methods to compress the data for effective usage of the cards. Segmentation of Region of Interest (ROI) is explored to achieve higher compression rate. The images are segmented by an extension of active contour segmentation model based on Particle Swarm Optimization (PSO) to optimize the segmentation as proposed in our previous work. The ROI and Non-ROI obtained is compressed using lossless and lossy compression respectively, using the proposed wavelet technique.

References

- Palanivelu, L. M. And Vijayakumar, P., "Effective Image Segmentation Using
Particle Swarm Optimization for Image Compression in Multi Application Smart Cards

Keywords
Multi-Application Smart cards  Image Segmentation  Image Compression  Active contour model
Particle Swarm Optimization
Biorthogonal Wavelets