Image segmentation is defined as the process of dividing an image into disjoint homogenous regions and it could be regarded as the fundamental step in various image
processing applications. In this paper, a novel multilevel thresholding segmentation method is proposed for grouping the pixels of remote sensing (RS) images into different homogenous regions. In this way, Hybrid Genetic Algorithm-Particle Swarm Optimization (HGAPSO) is used for finding the optimal set of threshold values. The new method is tested on two different study areas and results are compared with PSO-based image segmentation comprehensively. Results show HGAPSO based image segmentation performs better than PSO-based method in different points of view.

Reference


Index Terms

Computer Science

Signal Processing
Key words

Segmentation          Hybrid GA-PSO          Multilevel
thresholdding method