Abstract

This paper presents an Improved Algorithm for Image Segmentation System for a RGB colour image, and presents a proposed efficient colour image segmentation algorithm based on evolutionary approach i.e. improved Genetic algorithm. The proposed technique, without any predefined parameters determines the optimum number of clusters for colour images. The optimal number of clusters is obtained by using maximum fitness value of population selection. The advantage of this method lies in the fact that no prior knowledge related to number of clusters is required to segment the color image. Proposed algorithm strongly supports the better quality of segmentation. Experiments on standard images have given the satisfactory and comparable results with other techniques.
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Index Terms

Computer Science
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Keywords

Color image segmentation  Genetic algorithm  Clustering