Split/Merge and Chromosome Encoding Model of Genetic Algorithm For Image Segmentation & Optimization

Abstract:
The present paper focuses on image segmentation by the implementation of the split/merge approach which involves k-means clustering algorithm and proficient chromosome encoding model of Genetic Algorithm for merging. The input for a segmentation algorithm is an image that is converted to a gray-level intensity image through the preprocessing techniques and optimized according to some predefined quality measures. In order to optimize the image, an evolutionary computation algorithm is utilized.