Application of Genetic Algorithm & Morphological Operations for Image Segmentation

Abstract:

Image segmentation is an important part of the digital image processing. It is a low level, but difficult task that segments the image into regions of similar attributes. Segmentation simply changes the illustration of the image by dividing the image into similar components something that is more significant and easier to study. Till now there is no fundamental theory or algorithm on the subject of image segmentation. Although, in this paper genetic algorithm and mathematical morphological operations are used for optimizing or detecting homogenous regions of an image. The operation is performed on 16 x 16 subimages and the resultant subimages are then combined and the segmented images is produced.