Abstract

This paper proposes a method of initial seed pixel selection used for image segmentation based on edge detection technique. Initial pixel seed selection is the crucial and starting stage of image segmentation. This method is based on RGB color model. In this paper author use the gradient magnitude of the Red, Green and Blue components of true color image. Two type of information are used: non-edge information and similarity behavior of pixels to its neighbors. Edge detection technique is used to select initial seed pixel selection by computing gradient of the image intensity function. The Gradient magnitude provides image with regions having high intensity variation. The threshold value is used to obtain seed pixels and its value depends on the nature of the image. In this paper the comparative analysis of various images with different Edge Detection techniques is presented. The analysis of images with different edge detection techniques is presented using image processing tool MATLAB 7.5.0. It has been shown that gradient based edge detection techniques provides similar and better result than other edge detection techniques.
An Advance Approach to Select Initial Seed Pixel using Edge Detection

References

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Index Terms

Computer Science Artificial Intelligence

Keywords
Image segmentation seed selection non-edge information threshold value.