Abstract

Edge Detection is an important technique in image processing and it is the process of grouping an image into units that are consistent with respect to one or more features. Edge detection using gray images has lot of methods to segment and it has several set of algorithms to represent it. But the images produce more information in scenes i.e., color images have few set of methods to segment it. So, this paper represent color image edge detection methods in the literature and getting to prepare novel segmentation method by extracting the color channels in the RGB image into three with combined form of masking, filtering and Thresholding methods. Otsu method is one of the best and famous Thresholding method used in color image segmentation and it uses various combinations of masks to scan over the image to detect the correct boundary. Otsu method divides the segmentation tasks in two or more phases and provides the results better along with different phases. In the same way this paper discusses about RGB color model and fuzzy membership functions method and particularly about the usage of fuzzy membership functions which are used to create mask with some sort of rules based on RGB channel extraction to scan the separated channel image with few combinations
and include Threshold method and filtering for further to produce the output image in well enhanced manner.

References

17. Ajaya Kumar Dash, Banshidhar Majhi, “Image Segmentation Using Fuzzy Based
Edge Detection in Color Images using RGB Color Model

Histogram Thresholding”, IEEE 2015.

Index Terms

Computer Science
Image Processing
Keywords