Abstract

This paper presents a study on edge marking scheme of various standard edge detectors viz. Sobel, Prewitt, Roberts, Laplacian of Gaussian (LoG) and Canny. On the basis of edge map obtained for a synthetic rectangular board image, obtained from five edge detectors, suggests classifying the detectors in three categories namely, pre-marker, post-marker and mixed-marker. Pratt's figure of merit (PFOM) is used as a quantitative evaluation criterion for the above mentioned classification. Experimental results obtained for Lena and Parrot image provides convincing results to establish proposed classification.

References

A Study on Edge Marking Scheme of Various Standard Edge Detectors

Index Terms

Computer Science

Image Processing

Keywords

Edge Detection  Pratt's Figure Of Merit.