A Study on Edge Marking Scheme of Various Standard Edge Detectors

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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


Index Terms

Computer Science
Image Processing

Keywords

Edge Detection  Pratt's Figure Of Merit.