



Study and Comparison of Various Image Edge Detection Techniques

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KEYWORDS

Edge Detection, Noise, Digital Image Processing

ABSTRACT

Edges characterize boundaries and are therefore a problem of fundamental importance in image processing. Image Edge detection significantly reduces the amount of useless information, while preserving the important structural properties. Edge detection is in the forefront of image processing for object detection. A good understanding of edge detection algorithms. In this paper the comparison of various Image Edge Detection techniques is presented. The software used is MATLAB 7.0. It has been shown that the Canny's edge detection algorithm performs better than all these operators under almost all scenarios. Evaluation of the image performance, respectively. It has been observed that Canny's edge detection algorithm performs better than all the other edge detection algorithms under noisy conditions Canny, LoG(Laplacian of Gaussian), Robert, Prewitt,

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computationally more expensive compared to LoG(Laplacian of Gau
Robert's operator

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ABSTRACTING & INDEXING

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