Abstract

The edge detection is considered as a very significant technique in the field of Computer Vision. The term "edges" is used to define the boundaries between regions in a particular image, which supports with object segmentation and also in recognition of an object. In this paper authors focus a comparative study of edge detection techniques such as Sobel, Robert, Prewitt and impact of noise on it. The Experiment results find the edges of original image with the help of different type of edge detection technique such as Robert, Sobel and Prewitt and then we notice the quality of image with the help of PSNR, SNR, and Correlation Coefficient.
A Comparative Study of Edge Detection Techniques

- Baisa L. Gunjal, R. R. Manthalkar“an overview of transform domain robust digital image watermarking algorithms”; Journal of Emerging Trends in Computing and Information Sciences, ISSN 2079-8407 Volume 2 No. 1
  - Abdullah Bamatraf, Rosziati Ibrahim and Mohd. Najib Mohd. Salleh“A New Digital Watermarking Algorithm Using Combination of Least Significant Bit (LSB) and Inverse Bit”; journal of computing, volume 3, issue 4, April 2011, ISSN 2151-9617
- CANNY, J., A Computational Approach to Edge Detection, IEEE Transactions on Pattern Analysis and Machine Intelligence, 8, 679-700, 1986
- Sobel operator - Wikipedia, the free encyclopedia; en. wikipedia.org/wiki/Sobel_operator#Simplified description.
- CANNY, J., A Computational Approach to Edge Detection, IEEE Transactions on Pattern Analysis and Machine Intelligence, 8, 679-700, 1986

Index Terms

Computer Science
Image Processing
Keywords

Edge detection  Noise  PSNR  SNR  Correlation Coefficient.