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A study on various image edge detection techniques and their comparison

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Edge means the boundaries of object in image. Edge detection means to detect the boundaries of object in an image. In limage processing edge detection is very important sector. There are many edge detection techniques such as Robert, sobel, prewitt, log, canny, morphological edge detection etc. Here the author studies about these edge detection techniques and analysis their output image to find out a better way to detect edge of an image properly. The main purpose of the paper is detecting all the true edge of objects of an image. But every image is not free from noise. The basic problems of edge detection techniques are avoid the false edges. Hence to remove noises we should filter out the image. From many image filters we choose the better filters by analyzing their outputs. Then different edge detection techniques were applied on image. After that outputs were compared and determine the best edge detector and a better algorithm for edge detection. At present the application of edge detection use in many sectors. Here some applications that mainly depend on edge detections such as automotive driving, radar technology, bright band detection, biomedical, remote sensing via satellite, military communication, building detection etc are discussed.

Biography

Md. Omar Faroque completed his BSc in Computer Science and Engineering from University of Information Technology and Sciences. Currently, he is doing his MSc in Computer Science and Engineering at Chittagong University of Engineering and Technology. He is an Assistant Professor of Information Technology division at International Islamic university Chittagong. He has completed 05 thesis papers and 10 articles.

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