Abstract

Edge detection plays inevitable role in vision processing. The main issues are to discover edges in an image, so the initial step is to procedure of view reproduction. It has been shown in many papers that the most of the existing techniques has neglected the use of colours while detecting the edges but in many applications a region can be categorized based upon the colour. This paper has shown the result of different colour based edge detectors i.e. hue, PCA and integrated Hue and PCA based methods. I have used NSA technique with canny edge detection which gives far better results than the existing technique.

References

- N. Senthikumaran and R. Rajesh, "Edge Detection Techniques for Image


- Q. Song &quot;An edge detection algorithm based on multi-resolution image,&quot; Computer and Automation Engineering (ICCAE), vol. 4, Page(s): 292 – 296, 2010.

**Index Terms**

Computer Science

Algorithms

**Keywords**

Edge detection  PCA  Hue  Morphological operations  NSA  Canny edge detection.