Abstract

In this paper, we propose a new region-based Active Contour Model (ACM) that employs signed pressure force (SPF) as a level set function. Further, a flood fill algorithm is incorporated along with SPF function for robust object extraction. Signed pressure force (SPF) parameters, is able to control the direction of evolution of the region. The proposed system shares all advantages of the C–V and GAC models. The proposed ACM has an additional advantage i. e. of selective local or global segmentation. Flood Fill framework is employed for retrieving the object upon successful detection in the image. In addition, the computer simulation results show that the proposed system could address object detection within an image and its extraction with highest order of efficiency.

References

Active Contours based Object Detection and Extraction using SPF Parameter

668–676, ELSEVIER.

Index Terms

Computer Science
Pattern Recognition

Keywords

Image segmentation  signed pressure force parameters  flood fill algorithm
threshold segmentation