

Spatially Varying Weighting Function-Based Global and Local Statistical Active Contours. Application to X-Ray Images

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Abstract: Image segmentation is a crucial task in the image processing field. This paper presents a new region-based active contour which handles global information as well as local one, both based on the pixel intensities. The trade-off between these information is achieved by a spatially varying function computed for each contour node location. The application preliminary results of this method on computed tomography and X-ray images show outstanding and efficient object extraction

Keywords : image segmentation, Active contour, Averaged Shifted, histogram, pressure forces, statistics, Spatially varying function