

MICROARRAY IMAGE SEGMENTATION USING IMPROVED GOGAC METHOD

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ABSTRACT

Image Analysis remains one of the major challenges in image Processing. Numerous segmentation algorithms have been developed for a variety of applications. Disappointing outcome has been stumble upon in some cases, for several existing segmentation methods. In this paper, we improved Performance of the Globally Optimal Geodesic Active Contours method for image segmentation application by applying post processing with the results obtained by the GOGAC.

Analysis done using standard images (i.e. The Stanford Microarray Database human peripheral blood mononuclear cells), our concluding segmentation results compare constructively with the results obtained by the GOGAC and Improved GOGAC method. The qualitative analysis done proved that the proposed methods are less perceptible with respect to noise. As such, the rate of in proper segmentation, pixel loss and trapped center at local minima problems can be avoided.

In proposed method, we show that on the image, Improved GOGAC performs better than GOGAC, by correctly predicting the pixels and it is much faster than Active Contours method.

KEYWORDS: Active Contours, Image Analysis, Image Processing, Improved GOGAC, Globally Optimal Geodesic Active Contours