Abstract

Breast cancer is one of the usual cancers among the women in the worldwide population. The research paper is developing of a reliable tool to detect earlier signs of the breast cancer in mammograms. Accuracy rate of breast cancer in mammogram depends on image segmentation. Doctors and radiologists can miss the abnormality, due to inexperience's in the field of breast cancer detection. The image segmentation is very useful for doctors and radiologists to analysis the cancer stage. Image segmentation is very difficult process and challenging work in the field of medical image processing. The image segmentation algorithms are region-based and homogeneity of the image intensities in the regions of interest, which often fail to correct segmentation results due to intensity inhomogeneity. This paper proposed level set based bias corrected mammograms and threshold segmentation used to detect breast cancer with intensity inhomogeneities in the segmentation. This method is able to segment the image, estimate the bias field and used for bias correction. After bias corrected image, threshold segmentation and morphology techniques is applied to detect the breast cancer in mammograms with effective results.
Level Set based Bias Field Corrected Mammograms and Threshold Segmentation for the Detection of Breast Cancer

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**Index Terms**

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**Keywords**

Image Segmentation  Mammogram  Intensity inhomogeneity  Breast cancer  Level set
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