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Patent Search

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Abstract:

The invention discloses the method used to overcome the difficulties in early detection of breast masses due to poor visualization and artifacts in the sound (BUSI) of human body. In order to improve the quality while preserving important details, segmentation of the masses present is often used. f based breast cancer screening has proven to be the most effective method. In order to precisely segment breast tumours from ultrasound images, a this disclosure that uses grey wolf optimization to optimize the segmentation performance. The present invention disclosed herein is an optimal ima ultra sound image segmentation and classification comprising of: BUSI input (201); Preprocessing (202); Region of Interest (ROI) (203); Segmentation (205); GWO-WNN (206); and Classification (207); used to perform the optimal image segmentation of the ultra sound images for detecting the breast disclosure is validated on the BUSI images dataset, and found that the performance of the present disclosure with the metrics such as Specificity of % Recall (%) of 98.83, F1 Score of 99.77%, and Classification Efficiency of 99.62%.

Complete Specification

Description:FIELD OF INVENTION

The present invention relates to the technical field of Computer Science Engineering.

Particularly, the present invention is related to an Optimal Image Segmentation System for Ultra Sound Image Segmentation and Classification of t Image Processing in Computer Science Engineering.

More particularly, the present invention is related to an Optimal Image Segmentation System for Ultra Sound Image Segmentation and Classificati images to perform optimal segmentation to detect the breast masses to prevent the breast cancer.

BACKGROUND & PRIOR ART

In order to treat malignant tumours in the breast at an early stage, this invention is the most helpful method currently available. If a tissue is deteri the survival rate of the patient can be greatly improved through early detection and correct classification. A cancerous lump is a cancerous growth quickly to save lives. Multiple mass identification systems were used to detect breast masses in the healthcare and radiology diagnostic industries. methods. Optimal Image Segmentation System for Ultra Sound Image Segmentation and Classification. helps these industries enhance the quality

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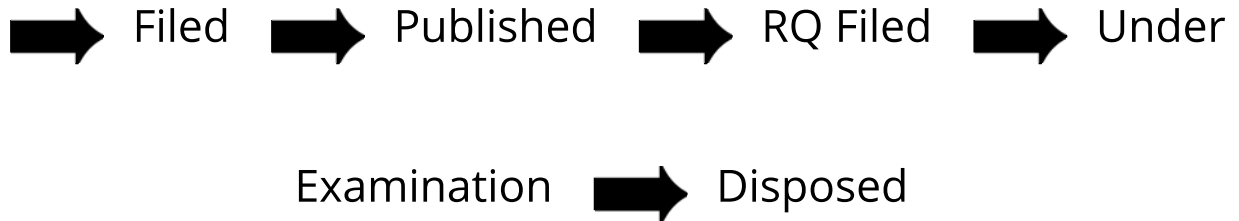
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