DETECTION OF DEFECTS IN WELD RADIOGRAPHIC IMAGES BY USING MULTI-SCALE GVF B-SPLINE SNAKE

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Abstract : In this paper, we use the active contour models (Snakes) for edge detection and segmentation of weld defects in radiographic images. Gradient Vector Flow snakes enhance the concave object extraction capability. However, the GVF snakes are sensitive to noise. Several new snake models were developed by combining different methods with GVF snake. Here, a multiscale GVF and B-spline model is proposed to overcome the traditional GVF disadvantage. Experiments on synthetic and radiographic images are promising.

Keywords : Defect extraction, Snake, GVF, Multi-scale, B-Spline.