

# Parametric active contour for weld defects boundary extraction in radiographic testing

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**Abstract :** Snakes, or active contours, are used extensively in computer vision and image processing applications, particularly to locate object boundaries. Problems associated with initialization and poor convergences to boundary concavities have aroused, which restricts their utility. This paper presents a new approach to deal with the defects contours estimation problem in radiographic images using parametric active contours. In this approach we exploit the performance of the GVF as external force and enhance it by joining to it an external adaptive pressure forces which speeds up to the snake progression, makes it less sensitive to initialization and provides capability of tracking the concavities.

**Keywords :** image segmentation, Active contour, Radiographic inspection