the International Conference on Modeling and Simulation

**2007**

# Weld defect detection with parametric deformable model

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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 convergence to boundary concavities have aroused, which restricts their utility. This paper presents a new approach to deal with the defects contour estimation problem in radiographic images using parametric active contours. In this approach we exploit the performance of the Gradient Vector Flow (GVF) as external force and enhance it by adding external adaptive pressure forces (APF) which speeds up the snake progression, makes it less sensitive to initialization and provides capability of tracking the concavities.

**Keywords :** : Radiographic testing, Active contour, GVF.