

# A Bayesian Mumford–Shah Model for Radiography Image Segmentation

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**Abstract:** This paper investigates the segmentation of radiographic images using a level set method based on a Bayesian Mumford–Shah model. The objective is to separate regions in an image that have very close arithmetic means, where a model based on the statistical mean is not effective. Experimental results show that the proposed model can successfully separate such regions, in both synthetic images and real radiography images.

**Keywords :** Level set