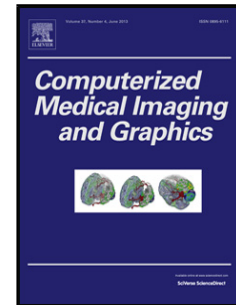


## Accepted Manuscript

Title: A Level-set Approach to Joint Image Segmentation and Registration with Application to CT Lung Imaging

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PII: S0895-6111(17)30052-6  
DOI: <http://dx.doi.org/doi:10.1016/j.compmedimag.2017.06.003>  
Reference: CMIG 1516

To appear in: *Computerized Medical Imaging and Graphics*

Received date: 20-2-2017  
Revised date: 6-6-2017  
Accepted date: 12-6-2017

Please cite this article as: Piotr Swierczynski, Bartłomiej W. Papież, Julia A. Schnabel, Colin Macdonald, A Level-set Approach to Joint Image Segmentation and Registration with Application to CT Lung Imaging, *Computerized Medical Imaging and Graphics* (2017), <http://dx.doi.org/10.1016/j.compmedimag.2017.06.003>

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**Highlights**

A simple novel joint image registration and segmentation method is presented. The new algorithm is based on a level-set formulation, which merges a classic Chan-Vese segmentation with the active dense displacement field estimation. Numerical implementation is evaluated on a publicly available lung CT data set. Improvement of registration and segmentation properties compared with existing methods is shown.

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