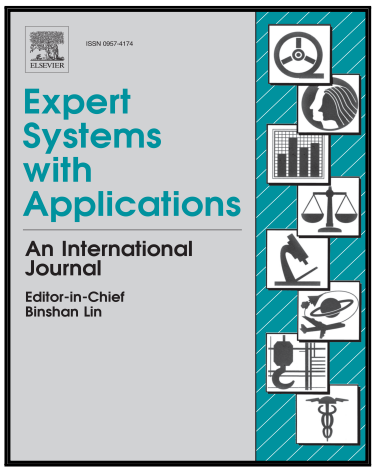

Clustering stability for automated color image segmentation

Ariel E. Bayá, Mónica G. Larese, Rafael Namías

PII: S0957-4174(17)30393-7
DOI: 10.1016/j.eswa.2017.05.064
Reference: ESWA 11356

To appear in: *Expert Systems With Applications*

Received date: 28 October 2016
Revised date: 2 May 2017
Accepted date: 27 May 2017

Please cite this article as: Ariel E. Bayá, Mónica G. Larese, Rafael Namías, Clustering stability for automated color image segmentation, *Expert Systems With Applications* (2017), doi: 10.1016/j.eswa.2017.05.064

Highlights

- We propose a clustering validation method (CS) to automatically segment images.
- We adapt CS to detect the best settings for color-texture feature extraction.
- Our method provides a score profile to compare alternative segmentation solutions.
- We test our procedure on textures, color natural images and 3D MRI data.
- Our method outperforms results obtained with other clustering validation indexes