

Accepted Manuscript

Unsupervised Hierarchical Image Segmentation through Fuzzy Entropy Maximization

Shibai Yin , Yiming Qian , Minglun Gong

PII: S0031-3203(17)30111-5
DOI: [10.1016/j.patcog.2017.03.012](https://doi.org/10.1016/j.patcog.2017.03.012)
Reference: PR 6085



To appear in: *Pattern Recognition*

Received date: 5 February 2016
Revised date: 5 March 2017
Accepted date: 6 March 2017

Please cite this article as: Shibai Yin , Yiming Qian , Minglun Gong , Unsupervised Hierarchical Image Segmentation through Fuzzy Entropy Maximization, *Pattern Recognition* (2017), doi: [10.1016/j.patcog.2017.03.012](https://doi.org/10.1016/j.patcog.2017.03.012)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- We present an unsupervised multilevel segmentation scheme for automatically segmenting grayscale and color images.
- Fuzzy 2-partition entropy is combined with Graph Cut to form a bi-level segmentation operator that splits a given region into 2 parts based on both global optimal threshold and local spatial coherence.
- A multilevel segmentation scheme iteratively performs on selected regions and color channels, producing a coarse-to-fine hierarchy of segments.
- The presented algorithm is evaluated using the Berkeley Segmentation Database and achieves competitive results compared with the state-of-the-art methods.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/4969883>

Download Persian Version:

<https://daneshyari.com/article/4969883>

[Daneshyari.com](https://daneshyari.com)