

# variational methods in image segmetation



[variational methods in image segmetation\\_ 下载链接1](#)

著者:Jean Michel Morel

出版者:Birkhaul

出版时间:1995

装帧:

isbn:9780817637200

This text contains a synthesis and a mathematical analysis of a wide set of algorithms and theories whose aim is the automatic segmentation of digital images as well as the understanding of visual perception. A common formalism for these theories and algorithms is obtained in variational form. Thanks to the formalization, mathematical questions about the soundness can be raised and answered. Perception theory has to deal with the complex interaction between regions and "edges" (or boundaries) in an image; in the variational segmentation energies, "edge" terms compete with "region" terms in a way which is intended to impose regularity on both regions and boundaries.

The first part of the book presents a unified presentation of the evidence in favour of the conjecture. It is proven that the competition of one-dimensional and two-dimensional energy terms in a variational formulation cannot create fractal-like behaviour for the edges. The proof of regularity for the edges of a segmentation constantly involves concepts from geometric measure theory, which proves to be central in image processing theory. The second part of the book provides a fast and self-contained presentation of the classical theory of rectifiable sets (the "edges") and unrectifiable sets ("fractals").

作者介绍:

Univ. Paris-Dauphine, Paris Cedex, France

Univ. degli Studi di Lecce, Lecce, Italy

目录:

[variational methods in image segmetation\\_ 下载链接1](#)

标签

评论

-----  
[variational methods in image segmetation\\_ 下载链接1](#)

书评

-----  
[variational methods in image segmetation\\_ 下载链接1](#)