Record Nr. UNINA9910299733203321 Autore He Jia Titolo Interactive segmentation techniques: algorithms and performance evaluation / / Jia He, Chang-Su Kim, C.-C. Jay Kuo Singapore:,: Springer,, 2014 Pubbl/distr/stampa 981-4451-60-6 **ISBN** [1st ed. 2014.] Edizione 1 online resource (x, 76 pages): illustrations (some color) Descrizione fisica Collana SpringerBriefs in Signal Processing, , 2196-4076 Disciplina 621.367 Soggetti Image processing - Digital techniques Image analysis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "ISSN: 2196-4076." Note generali Nota di bibliografia Includes bibliographical references. Introduction -- Overview and classification of interactive segmentation Nota di contenuto methods -- Interactive segmentation algorithms -- Performance evaluation -- Conclusion and future work. This book focuses on interactive segmentation techniques, which have Sommario/riassunto been extensively studied in recent decades. Interactive segmentation emphasizes clear extraction of objects of interest, whose locations are roughly indicated by human interactions based on high level perception. This book will first introduce classic graph-cut segmentation algorithms and then discuss state-of-the-art techniques, including graph matching methods, region merging and label propagation, clustering methods, and segmentation methods based on edge detection. A comparative analysis of these methods will be provided with quantitative and qualitative performance evaluation, which will be illustrated using natural and synthetic images. Also, extensive statistical performance comparisons will be made. Pros and

cons of these interactive segmentation methods will be pointed out, and their applications will be discussed. There have been only a few surveys on interactive segmentation techniques, and those surveys do

comprehensive up-to-date survey on the fast developing topic and the performance evaluation, this book can help readers learn interactive

not cover recent state-of-the art techniques. By providing

segmentation techniques quickly and thoroughly.