Record Nr. UNINA9910781666803321 Markov random fields for vision and image processing / / edited by **Titolo** Andrew Blake, Pushmeet Kohli, and Carsten Rother Pubbl/distr/stampa Cambridge, Mass., : MIT Press, ©2011 **ISBN** 1-283-25865-X 9786613258656 0-262-29835-X Descrizione fisica 1 online resource (472 p.) Altri autori (Persone) BlakeAndrew <1956-> KohliPushmeet RotherCarsten 006.3/70151 Disciplina Soggetti Image processing - Mathematics Computer graphics - Mathematics Computer vision - Mathematics Markov random fields Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Cover: Contents: 1 Introduction to Markov Random Fields: I Algorithms for Inference of MAP Estimates for MRFs; 2 Basic Graph Cut Algorithms; 3 Optimizing Multilabel MRFs Using Move-Making Algorithms; 4 Optimizing Multilabel MRFs with Convex and Truncated Convex Priors; 5 Loopy Belief Propagation, Mean Field Theory, and Bethe Approximations; 6 Linear Programming and Variants of Belief Propagation; II Applications of MRFs, including Segmentation; 7 Interactive Foreground Extraction; 8 Continuous-Valued MRF for Image Segmentation; 9 Bilayer Segmentation of Video 10 MRFs for Superresolution and Texture Synthesis11 A Comparative Study of Energy Minimization Methods for MRFs; III Further Topics: Inference, Parameter Learning, and Continuous Models; 12 Convex

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State-of-the-art research on MRFs, successful MRF applications, and advanced topics for future study.