1. Record Nr.   UNINA9910300109003321

   Titolo   Research in Shape Analysis : WiSH2, Sirince, Turkey, June 2016 / / edited by Asli Genctav, Kathryn Leonard, Sibel Tari, Evelyne Hubert, Geraldine Morin, Noha El-Zehiry, Erin Chambers

   Pubbl/distr/stampa Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018

   ISBN   3-319-77066-7

   Edizione   [1st ed. 2018.]

   Descrizione fisica 1 online resource (XIII, 172 p. 90 illus., 74 illus. in color.)

   Collana   Association for Women in Mathematics Series, , 2364-5733 ; ; 12

   Disciplina   003.3

   Soggetti   Mathematical models
                       Numerical analysis
                       Mathematical Modeling and Industrial Mathematics
                       Numerical Analysis

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Nota di contenuto   Preface -- Medial Fragments for Segmentation of Articulating Objects in Images -- Scaffolding a Skeleton -- Convolution Surfaces with Varying Radius: Formulae for Skeletons Made of Arcs of Circles and Line Segments -- Exploring 2D Shape Complexity -- Phase Field Topology Constraints -- Adaptive Deflation Stopped by Barrier Structure for Equating Shape Topologies under Topological Noise -- Joint Segmentation and Nonlinear Registration Using Fast Fourier Transform and Total Variation -- Multi-parameter Mumford-Shah Segmentation -- L1-Regularized Inverse Problems for Image Deblurring via Bound and Equality Constrained Optimization -- Shape Patterns in Digital Fabrication: A Survey on Negative Polsson's Ratio Metamaterials. .

   Sommario/riassunto Based on the second Women in Shape (WiSH) workshop held in Sirince, Turkey in June 2016, these proceedings offer the latest research on shape modeling and analysis and their applications. The 10 peer-reviewed articles in this volume cover a broad range of topics, including shape representation, shape complexity, and characterization in solving image-processing problems. While the first six chapters establish understanding in the theoretical topics, the remaining chapters discuss important applications such as image segmentation, registration, image

deblurring, and shape patterns in digital fabrication. The authors in this volume are members of the WiSH network and their colleagues, and most were involved in the research groups formed at the workshop. This volume sheds light on a variety of shape analysis methods and their applications, and researchers and graduate students will find it to be an invaluable resource for further research in the area.