

1. Record Nr.	UNISA996466252203316
Titolo	Discrete Geometry for Computer Imagery [[electronic resource]] : 13th International Conference, DGC I 2006, Szeged, Hungary, October 25-27, 2006, Proceedings // edited by Attila Kuba, László G. Nyúl, Kálmán Palágyi
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2006
ISBN	3-540-47652-0
Edizione	[1st ed. 2006.]
Descrizione fisica	1 online resource (XIII, 688 p.)
Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 4245
Disciplina	006.601/516
Soggetti	Application software Optical data processing Computer graphics Computer science—Mathematics Computer simulation Algorithms Computer Applications Image Processing and Computer Vision Computer Graphics Discrete Mathematics in Computer Science Simulation and Modeling Algorithm Analysis and Problem Complexity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Discrete Geometry -- Duality and Geometry Straightness, Characterization and Envelope -- On Minimal Perimeter Polyminoos -- A Generic Approach for n-Dimensional Digital Lines -- Two Discrete-Euclidean Operations Based on the Scaling Transform -- Geometry of Neighborhood Sequences in Hexagonal Grid -- Recognition of Blurred Pieces of Discrete Planes -- Discrete Tomography -- The Number of Line-Convex Directed Polyominoes Having the Same Orthogonal Projections -- A Network Flow Algorithm for Binary Image

Reconstruction from Few Projections -- Fast Filling Operations Used in the Reconstruction of Convex Lattice Sets -- Reconstruction Algorithm and Switching Graph for Two-Projection Tomography with Prohibited Subregion -- A Geometry Driven Reconstruction Algorithm for the Mojette Transform -- Quantised Angular Momentum Vectors and Projection Angle Distributions for Discrete Radon Transformations -- A Benchmark Evaluation of Large-Scale Optimization Approaches to Binary Tomography -- Construction of Switching Components -- Discrete Topology -- Minimal Non-simple and Minimal Non-cosimple Sets in Binary Images on Cell Complexes -- Combinatorial Relations for Digital Pictures -- Reusing Integer Homology Information of Binary Digital Images -- On the Lattice Structure of Subsets of Octagonal Neighborhood Sequences in \mathbb{Z}^n -- On the Connectedness of Rational Arithmetic Discrete Hyperplanes -- Homology of Simplicial Set -- Measuring Intrinsic Volumes in Digital 3d Images -- Distance -- An Objective Comparison Between Gray Weighted Distance Transforms and Weighted Distance Transforms on Curved Spaces -- Chordal Axis on Weighted Distance Transforms -- Attention-Based Mesh Simplification Using Distance Transforms -- Generating Distance Maps with Neighbourhood Sequences -- Hierarchical Chamfer Matching Based on Propagation of Gradient Strengths -- Elliptical Distance Transforms and Applications -- Image Analysis -- A Composite and Quasi Linear Time Method for Digital Plane Recognition -- Fusion Graphs, Region Merging and Watersheds -- Revisiting Digital Straight Segment Recognition -- On Discrete Moments of Unbounded Order -- Feature Based Defuzzification in \mathbb{Z}^2 and \mathbb{Z}^3 Using a Scale Space Approach -- Improving Difference Operators by Local Feature Detection -- Shape Representation -- An Optimal Algorithm for Detecting Pseudo-squares -- Optimization Schemes for the Reversible Discrete Volume Polyhedrization Using Marching Cubes Simplification -- Arithmetic Discrete Hyperspheres and Separatingness -- The Eccentricity Transform (of a Digital Shape) -- Projected Area Based 3D Shape Similarity Evaluation -- Continuous Level of Detail on Graphics Hardware -- Topological and Geometrical Reconstruction of Complex Objects on Irregular Isothetic Grids -- Fast Polynomial Segmentation of Digitized Curves -- Segmentation -- Fuzzy Segmentation of Color Video Shots -- Application of Surface Topological Segmentation to Seismic Imaging -- Watershed Segmentation with Chamfer Metric -- Generalized Map Pyramid for Multi-level 3D Image Segmentation -- Topologically Correct Image Segmentation Using Alpha Shapes -- Skeletonization -- New Removal Operators for Surface Skeletonization -- Skeleton Pruning by Contour Partitioning -- A New 3D Parallel Thinning Scheme Based on Critical Kernels -- Order Independence in Binary 2D Homotopic Thinning -- Exact Euclidean Medial Axis in Higher Resolution -- Skeletonization and Distance Transforms of 3D Volumes Using Graphics Hardware -- Surfaces and Volumes -- How to Tile by Dominoes the Boundary of a Polycube -- A Generalized Preimage for the Standard and Supercover Digital Hyperplane Recognition -- Distance Transforms on Anisotropic Surfaces for Surface Roughness Measurement -- A 3D Live-Wire Segmentation Method for Volume Images Using Haptic Interaction -- Minimal Decomposition of a Digital Surface into Digital Plane Segments Is NP-Hard -- Erratum -- Topological and Geometrical Reconstruction of Complex Objects on Irregular Isothetic Grids.
