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Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 3429
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Soggetti	Optical data processing Computer graphics Computer science—Mathematics Computer simulation Algorithms Image Processing and Computer Vision Computer Graphics Discrete Mathematics in Computer Science Simulation and Modeling Algorithm Analysis and Problem Complexity
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Applications -- Increasing Interconnection Network Connectivity for Reducing Operator Complexity in Asynchronous Vision Systems -- Geometric Robot Mapping -- Discrete Geometry Applied in Hard Real-Time Systems Validation -- Discrete Hierarchical Geometry -- Hierarchical Watersheds Within the Combinatorial Pyramid Framework -- Optimal Design of 2D/3D Hierarchical Content-Based Meshes for Multimedia -- Receptive Fields for Generalized Map Pyramids: The Notion of Generalized Orbit -- Resolution Pyramids on the FCC and BCC Grids -- Discrete Tomography -- The Mojette Transform: The First

Ten Years -- On the Stability of Reconstructing Lattice Sets from X-rays Along Two Directions -- Reconstruction of Decomposable Discrete Sets from Four Projections -- A Tomographical Characterization of L-Convex Polyominoes -- Computerized Tomography with Digital Lines and Linear Programming -- A Discrete Modulo N Projective Radon Transform for $N \times N$ Images -- Two Remarks on Reconstructing Binary Vectors from Their Absorbed Projections -- How to Obtain a Lattice Basis from a Discrete Projected Space -- Discrete Topology -- Local Characterization of a Maximum Set of Digital (26,6)-Surfaces -- Algorithms for the Topological Watershed -- The Class of Simple Cube-Curves Whose MLPs Cannot Have Vertices at Grid Points -- Computation of Homology Groups and Generators -- Inclusion Relationships and Homotopy Issues in Shape Interpolation for Binary Images -- Object Properties -- Discrete Bisector Function and Euclidean Skeleton -- Pixel Queue Algorithm for Geodesic Distance Transforms -- Analysis and Comparative Evaluation of Discrete Tangent Estimators -- Surface Volume Estimation of Digitized Hyperplanes Using Weighted Local Configurations -- Rectification of the Chordal Axis Transform and a New Criterion for Shape Decomposition -- Reconstruction and Recognition -- Generalized Functionality for Arithmetic Discrete Planes -- Complexity Analysis for Digital Hyperplane Recognition in Arbitrary Fixed Dimension -- An Elementary Algorithm for Digital Line Recognition in the General Case -- Supercover Model and Digital Straight Line Recognition on Irregular Isothetic Grids -- Discrete Epipolar Geometry -- Local Point Configurations of Discrete Combinatorial Surfaces -- Reversible Polygonalization of a 3D Planar Discrete Curve: Application on Discrete Surfaces -- Uncertain Geometry -- Uncertain Geometry in Computer Vision -- Optimal Blurred Segments Decomposition in Linear Time -- Shape Preserving Digitization of Binary Images After Blurring -- Visualization -- A Low Complexity Discrete Radiosity Method -- A Statistical Approach for Geometric Smoothing of Discrete Surfaces -- Arbitrary 3D Resolution Discrete Ray Tracing of Implicit Surfaces.
