1. Record Nr. UNINA9910483954303321

Titolo	Mathematical Methods for Curves and Surfaces : 7th International Conference, MMCS 2008, Tønsberg, Norway, June 26-July 1, 2008, Revised Selected Papers / / edited by Morten Dæhlen, Michael S. Floater, Tom Lyche, Jean-Louis Merrien, Knut Morken, Larry L. Schumaker
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2010
ISBN	1-280-38559-6 9786613563514 3-642-11620-5
Edizione	[1st ed. 2010.]
Descrizione fisica	1 online resource (446 p. 193 illus.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 5862
Classificazione	DAT 756f MAT 532f MAT 533f SK 370 SS 4800
Altri autori (Persone)	DhlenMorten <1959->
Disciplina	516.352
Soggetti	Image processing - Digital techniques Computer vision Computer graphics Computer simulation Computer-aided engineering Computer science - Mathematics Discrete mathematics Computer Imaging, Vision, Pattern Recognition and Graphics Computer Graphics Computer Modelling Computer-Aided Engineering (CAD, CAE) and Design Computer Vision Discrete Mathematics in Computer Science
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	MMCS 2008 -- Partial Differential Equations for Interpolation and Compression of Surfaces -- Construction of Rational Curves with Rational Rotation-Minimizing Frames via Möbius Transformations -- Fat Arcs for Implicitly Defined Curves -- Geometric Properties of the Adaptive Delaunay Tessellation -- Quadrangular Parameterization for Reverse Engineering -- A Comparison of Three Commodity-Level Parallel Architectures: Multi-core CPU, Cell BE and GPU -- Mean Distance from a Curve to Its Control Polygon -- Compactly Supported Splines with Tension Properties on a Three-Direction Mesh -- Some Geometrical Aspects of Control Points for Toric Patches -- A Comparison of Different Progressive Iteration Approximation Methods -- A Topological Lattice Refinement Descriptor for Subdivision Schemes -- Subdivision Schemes and Norms -- Geometric Design Using Space Curves with Rational Rotation-Minimizing Frames -- Multiresolution Analysis for Minimal Energy C r -Surfaces on Powell-Sabin Type Meshes -- Segmentation of 3D Tubular Structures by a PDE-Based Anisotropic Diffusion Model -- Smoothing the Antagonism between Extraordinary Vertex and Ordinary Neighbourhood on Subdivision Surfaces -- Simplification of FEM-Models on Cell BE -- Effects of Noise on Quantized Triangle Meshes -- Reparameterization of Curves and Surfaces with Respect to Their Convolution -- An Introduction to Guided and Polar Surfacing -- An Iterative Algorithm with Joint Sparsity Constraints for Magnetic Tomography -- Constructing Good Coefficient Functionals for Bivariate C 1 Quadratic Spline Quasi-Interpolants -- Sampling and Stability -- Shape Preserving Hermite Interpolation by Rational Biquadratic Splines -- Tensor Product B-Spline Mesh Generation for Accurate Surface Visualizations in the NIST Digital Library of Mathematical Functions.-Low Degree Euclidean and Minkowski Pythagorean Hodograph Curves -- On the Local Approximation Power of Quasi-Hierarchical Powell-Sabin Splines -- Logarithmic Curvature and Torsion Graphs.
Sommario/riassunto	This volume constitutes the thoroughly refereed post-conference proceedings of the 7th International Conference on Mathematical Methods for Curves and Surfaces, MMCS 2008, held in Tønsberg, Norway, in June/July 2008. The 28 revised full papers presented were carefully reviewed and selected from 129 talks presented at the conference. The topics addressed by the papers range from mathematical analysis of various methods to practical implementation on modern graphics processing units.