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Titolo	A Short Course in Computational Geometry and Topology // by Herbert Edelsbrunner
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Soggetti	Mathematics - Data processing Manifolds (Mathematics) Biomedical engineering Biomathematics Computational Science and Engineering Manifolds and Cell Complexes Biomedical Engineering and Bioengineering Mathematical and Computational Biology
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Roots of Geometry and Topology -- Voronoi and Delaunay Diagrams -- Weighted Diagrams -- Three Dimensions -- Alpha Complexes -- Holes -- Area Formulas -- Topological Spaces -- Homology Groups -- Complex Construction -- Filtrations -- PL Functions -- Matrix Reduction -- Epilogue.
Sommario/riassunto	With the aim to bring the subject of Computational Geometry and Topology closer to the scientific audience, this book is written in thirteen ready-to-teach sections organized in four parts: TESSELLATIONS, COMPLEXES, HOMOLOGY, PERSISTENCE. To speak to the non-specialist, detailed formalisms are often avoided in favor of lively 2- and 3-dimensional illustrations. The book is warmly recommended to everybody who loves geometry and the fascinating world of shapes.