

1. Record Nr.	UNINA9910827378403321
Titolo	Handbook of computational geometry // edited by J.-R. Sack, J. Urrutia
Pubbl/distr/stampa	New York ; ; Amsterdam, : Elsevier, 2000
ISBN	1-281-05842-4 9786611058425 0-08-052968-2
Edizione	[1st ed.]
Descrizione fisica	1 online resource (1087 p.)
Altri autori (Persone)	SackJ.-R <1954-> (Jorg-Rudiger) UrrutiaJ (Jorge)
Disciplina	516/.00285
Soggetti	Geometry - Data processing Computer graphics Combinatorial geometry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Front Cover; Handbook of Computational Geometry; Copyright Page; Preface; List of Contributors; Contents; Chapter 1. Davenport-Schinzel sequences and their geometric applications; Chapter 2. Arrangements and their applications; Chapter 3. Discrete geometric shapes: Matching, interpolation, and approximation; Chapter 4. Deterministic parallel computational geometry; chapter 5. Voronoi diagrams; Chapter 6. Mesh generation; Chapter 7. Applications of computational geometry to geographic information systems Chapter 8. Making geometry visible: An introduction to the animation of geometric algorithmsChapter 9. Spanning trees and spanners; Chapter 10. Geometric data structures; Chapter 11. Polygon decomposition; Chapter 12. Link distance problems; Chapter 13. Derandomization in computational geometry; Chapter 14. Robustness and precision issues in geometric computation; Chapter 15. Geometric shortest paths and network optimization; Chapter 16. Randomized algorithms in computational geometry; Chapter 17. Spatial data structures: Concepts and design choices Chapter 18. Parallel computational geometry: An approach using randomizationChapter 19. Visibility in the plane; Chapter 20. Closest-

point problems in computational geometry; Chapter 21. Graph drawing; Chapter 22. Art gallery and illumination problems; Author Index; Subject Index

Sommario/riassunto

Computational Geometry is an area that provides solutions to geometric problems which arise in applications including Geographic Information Systems, Robotics and Computer Graphics. This Handbook provides an overview of key concepts and results in Computational Geometry. It may serve as a reference and study guide to the field. Not only the most advanced methods or solutions are described, but also many alternate ways of looking at problems and how to solve them.
