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Nota di contenuto	to geometric computing: From algorithms to software -- Voronoi methods in GIS -- Digital elevation models and TIN algorithms -- Visualization of TINs -- Generalization of spatial data: Principles and selected algorithms -- Spatial data structures: Concepts and design choices -- Space filling curves versus random walks -- External-memory algorithms with applications in GIS -- Precision and robustness in geometric computations.
Sommario/riassunto	This tutorial survey brings together two lines of research and development whose interaction promises to have significant practical

impact on the area of spatial information processing in the near future: geographic information systems (GIS) and geometric computation or, more particularly, geometric algorithms and spatial data structures. In nine uniformly structured and coherent chapters, the authors present a unique survey ranging from the history and basic characteristics to current issues of precision and robustness of geometric computing. This textbook is ideally suited for advanced courses on GIS and applied geometric algorithms. Research and design professionals active in the area will find it valuable as a state-of-the-art survey.