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Nota di contenuto Modeling and Querying -- Moving Objects: Logical Relationships and

Queries -- A Spatiotemporal Model and Language for Moving Objects on Road Networks -- Similarity of Cardinal Directions -- Moving-Object Query Processing -- Querying Mobile Objects in Spatio-Temporal Databases -- K-Nearest Neighbor Search for Moving Query Point -- Semantic Caching in Location-Dependent Query Processing --Query Processing—-Architectures and Cost Estimation -- A Model-Based, Open Architecture for Mobile, Spatially Aware Applications --Continuous Queries within an Architecture for Querying XML-Represented Moving Objects -- Selectivity Estimation of Complex Spatial Queries -- Wavelet-Based Cost Estimation for Spatial Queries --Processing Advanced Queries -- Evaluation of Buffer Queries in Spatial Databases -- On Multi-Way Spatial Joins with Direction Predicates --Discovering Spatial Co-location Patterns: A Summary of Results --Constrained Nearest Neighbor Queries -- Formal Aspects -- Calendars, Time Granularities, and Automata -- Composing Cardinal Direction Relations -- Data Representation -- Creating Representations for Continuously Moving Regions from Observations -- Compressing Multiresolution Triangle Meshes -- Design and Implementation of Multi-scale Databases -- Industrial Session -- The Architecture of

ArcIMS, a Distributed Internet Map Server -- Efficient Processing of Large Spatial Queries Using Interior Approximations -- Data Warehousing and Mining -- Efficient Mining of Spatiotemporal Patterns -- Efficient OLAP Operations in Spatial Data Warehouses -- Preaggregation in Spatial Data Warehouses -- Indexing -- Interval Sequences: An Object-Relational Approach to Manage Spatial Data -- Query Processing in Broadcasted Spatial Index Trees -- Object-Relational Indexing for General Interval Relationships.

Sommario/riassunto

The Seventh International Symposium on Spatial and Temporal Databases (SSTD 2001), held in Redondo Beach, CA, USA, July 12(15, 2001, brought together leading researchers and developers in the area of spatial, temporal, and spatio-temporal databases to discuss the state of the art in spatial and temporal data management and applications, and to understand the challenges and - search directions in the advancing area of data management for moving objects. The symposium served as a forum for disseminating research in spatial and temporal data management, and for maximizing the interchange of knowledge among researchers from the established spatial and temporal database com- nities. The exchange of research ideas and results not only contributes to the academic arena, but also bene ts the user and commercial communities. SSTD 2001 was the seventh in the series of symposia that started in Santa Barbara a dozen years ago and has since been held every two years, in Zurich, Singapore, Portland (Maine), Berlin, and Hong Kong. By 1999, the series had become well established as the premier international forum devoted solely to spatial database management, and it was decided to extend the scope of the series to also cover temporal database management. This extended scope was chosen due, in part, to the increasing importance of research that considers spatial and temporal aspects jointly.