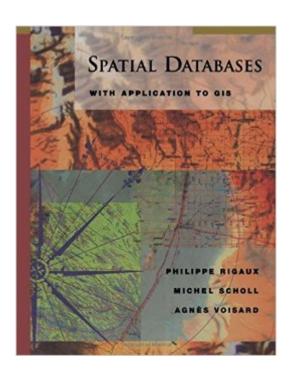
The book was found

Spatial Databases: With Application To GIS (The Morgan Kaufmann Series In Data Management Systems)





Synopsis

Spatial Databases is the first unified, in-depth treatment of special techniques for dealing with spatial data, particularly in the field of geographic information systems (GIS). This book surveys various techniques, such as spatial data models, algorithms, and indexing methods, developed to address specific features of spatial data that are not adequately handled by mainstream DBMS technology. The book also reviews commercial solutions to geographic data handling: ArcInfo, ArcView, and Smallworld GISs; and two extensions to the relational model, PostgreSQL and Oracle Spatial. The authors examine these underlying GIS technologies, assess their strengths and weaknesses, and consider specific uses for which each product is best suited. * Examines the strengths of various query languages and approaches to query processing.* Explains the use of computational geometry in spatial databases GISs, providing necessary background and an in-depth look at key algorithms.* Covers spatial access methods, including the R-tree and several space-driven structures, and is filled with dozens of helpful illustrations.

Book Information

Series: The Morgan Kaufmann Series in Data Management Systems

Hardcover: 410 pages

Publisher: Morgan Kaufmann; 1 edition (June 1, 2001)

Language: English

ISBN-10: 1558605886

ISBN-13: 978-1558605886

Product Dimensions: 7.7 x 1.2 x 9.6 inches

Shipping Weight: 2.3 pounds (View shipping rates and policies)

Average Customer Review: 4.8 out of 5 stars Â See all reviews (4 customer reviews)

Best Sellers Rank: #1,195,788 in Books (See Top 100 in Books) #109 in Books > Computers &

Technology > Programming > Graphics & Multimedia > GIS #272 in Books > Science & Math >

Earth Sciences > Geography > Information Systems #506 in Books > Computers & Technology >

Networking & Cloud Computing > Network Administration > Storage & Retrieval

Customer Reviews

This textbook is an excellent resource for people specifically interested in the theoretical nuts and bolts of spatial databases. The book covers a lot of ground in just over 400 pages. It would be an excellent text for an advanced GIS programming course for either geography students or computer science students. For the geography student, the text provides an excellent coverage of database

concepts while drawing on familiar topics. For the computer science student, the book extends basic knowledge of DBMS for spatial applications. The book is divided into eight chapters. Each chapter is completed with an excellent bibliographical review of relevant publications. This review, alone, is worth the price of the book. Chapter 1: Introduction to Spatial Database: Covers basic concepts of SQL, DBMS and spatial data. Chapter 2: Representation of Spatial Objects: This chapter should be familiar to anyone with a GIS background but would fill in the gaps for computer science students. The section on formats and standards is a bit dated but provides a nice theoretical background - especially for the Census TIGER data. Chapter 3: Logical Models and Query Languages: Opposite of Chapter 2, this chapter will challenge the Geography student while further grounding the Computer Science student in GIS data types. Chapter 4: The Constraint Data Model: Here the authors choose to introduce some unique material in the form of the constraint data model. The model is designed specifically to encode spatial data in a basic relational model. The chapter even breaks down the model into relational algebra statements. For most teaching purposes, this chapter can be skipped. Chapter 5: Computational Geometry: An odd gem in a text on spatial databases.

Download to continue reading...

Spatial Databases: With Application to GIS (The Morgan Kaufmann Series in Data Management Systems) Transactional Information Systems: Theory, Algorithms, and the Practice of Concurrency Control and Recovery (The Morgan Kaufmann Series in Data Management Systems) Distributed Algorithms (The Morgan Kaufmann Series in Data Management Systems) Measuring Data Quality for Ongoing Improvement: A Data Quality Assessment Framework (The Morgan Kaufmann Series on Business Intelligence) Spatial Evolutionary Modeling (Spatial Information Systems) Social Data Analytics: Collaboration for the Enterprise (The Morgan Kaufmann Series on Business Intelligence) Placing History: How Maps, Spatial Data, and GIS Are Changing Historical Scholarship Data Architecture: A Primer for the Data Scientist: Big Data, Data Warehouse and Data Vault Data Analytics: Practical Data Analysis and Statistical Guide to Transform and Evolve Any Business Leveraging the Power of Data Analytics, Data Science, ... (Hacking Freedom and Data Driven Book 2) Digital Watermarking (The Morgan Kaufmann Series in Multimedia Information and Systems) VLSI Test Principles and Architectures: Design for Testability (The Morgan Kaufmann Series in Systems on Silicon) How to Build a Digital Library (Morgan Kaufmann Series in Multimedia Information and Systems (Paperback)) Spatial Reasoning Tests - The Ultimate Guide to Passing Spatial Reasoning Tests (Testing Series) Ecocriticism and Geocriticism: Overlapping Territories in Environmental and Spatial Literary Studies (Geocriticism and Spatial Literary Studies) Data

Management: Databases & Organizations Visual Thinking for Design (Morgan Kaufmann Series in Interactive Technologies) Visualizing Quaternions (The Morgan Kaufmann Series in Interactive 3D Technology) Computer Architecture, Fifth Edition: A Quantitative Approach (The Morgan Kaufmann Series in Computer Architecture and Design) Computer Organization and Design, Fourth Edition: The Hardware/Software Interface (The Morgan Kaufmann Series in Computer Architecture and Design) Computer Architecture: A Quantitative Approach (The Morgan Kaufmann Series in Computer Architecture and Design)

<u>Dmca</u>