Record Nr. UNISA996466228603316 Constraint Databases and Applications [[electronic resource]]: First **Titolo** International Symposium, CDB 2004, Paris, France, June 12-13, 2004, Proceedings / / edited by Bart Kuijpers, Peter Revesz Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 2004 **ISBN** 3-540-25954-6 Edizione [1st ed. 2004.] 1 online resource (XII, 184 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743;; 3074 Collana 005.75 Disciplina Soggetti Data structures (Computer science) Database management Information storage and retrieval Information technology Business—Data processing Geographical information systems Data Structures and Information Theory **Database Management** Information Storage and Retrieval IT in Business Geographical Information Systems/Cartography Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Efficient Query Evaluation -- Constraint Databases, Data Structures and Efficient Query Evaluation -- Spatial and Spatio-Temporal Data -- A New Shape Function Based Spatiotemporal Interpolation Method --Moving Objects and Their Equations of Motion -- A Triangle-Based Logic for Affine-Invariant Querying of Two-Dimensional Spatial Data --Applications -- Applying Constraint Databases in the Determination of Potential Minimal Conflicts to Polynomial Model-Based Diagnosis --Constraint Database Solutions to the Genome Map Assembly Problem -- Dynamic FP-Tree Based Mining of Frequent Patterns Satisfying

Succinct Constraints -- Query Optimization -- Semantic Optimization

## Sommario/riassunto

of Preference Queries -- Constraint Processing Techniques for Improving Join Computation: A Proof of Concept -- The Future of Constraint Databases -- Taking Constraints out of Constraint Databases -- Integrating Constraint and Relational Database Systems.

The ?rst International Symposium on the Applications of Constraint Databases (CDB2004) took place in Paris, France, on June 12-13, 2004, just before the ACM SIGMOD and PODS conferences. Since the publication of the paper "Constraint Query Languages" by Kan-lakis, Kuper and Revesz in 1990, the last decade has seen a growing interest in constraint database theory, query evaluation, and applications, re? ected in a variety of conferences, journals, and books. Constraint databases have proven to be extremely ?exible and adoptable in environments that relational database systems cannot serve well, such as geographic information systems and bioinf- matics. This symposium brought together people from several diverse areas all c- tributing to the practice and the application of constraint databases. It was a continuation and extension of previous workshops held in Friedrichshafen, G-many (1995), Cambridge, USA (1996), Delphi, Greece (1997), and Seattle, USA (1998) as well as of the work in the comprehensive volume "Constraint Data- ses" edited by G. Kuper, L. Libkin and J. Paredaens (2000) and the textbook "Introduction to Constraint Databases" by P. Revesz (2002). The aim of the symposium was to open new and future directions in c- straint database research: to address constraints over domains other than the reals; to contribute to a better implementation of constraint database systems, in particular of query evaluation; to address e?cient quanti?er elimination; and to describe applications of constraint databases.