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Descrizione fisica	1 online resource (X, 466 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 2505
Disciplina	511/.5
Soggetti	Optical data processing Discrete mathematics Database management Computer science—Mathematics Data structures (Computer science) Software engineering Image Processing and Computer Vision Discrete Mathematics Database Management Discrete Mathematics in Computer Science Data Structures Software Engineering
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 and index.
Nota di contenuto	Invited Papers -- Ubiquitous, Decentralized, and Evolving Software: Challenges for Software Engineering -- Can Behavioral Requirements Be Executed? (And Why Would We Want to Do So?) -- Biographs as a Model for Mobile Interaction -- Contributed Papers -- Approximating the Behaviour of Graph Transformation Systems -- Transforming Specification Architectures by GenGED -- Decomposing Graphs with Symmetries -- Graph Transformations for the Vehicle Routing and Job Shop Scheduling Problems -- Call-by-Value ?-Graph Rewriting Without

Rewriting -- Transformation: The Missing Link of MDA -- Termination  
Detection of Distributed Algorithms by Graph Relabelling Systems --  
Graph Transformation with Time: Causality and Logical Clocks --  
Relabelling in Graph Transformation -- Euler Graphs, Triangle-Free  
Graphs and Bipartite Graphs in Switching Classes -- Confluence of  
Typed Attributed Graph Transformation Systems -- Abstraction and  
Control for Shapely Nested Graph Transformation -- Hyperedge  
Substitution in Basic Atom-Replacement Languages -- Distributed  
Graph Transformation Units -- Describing Policies with Graph  
Constraints and Rules -- Computer Aided Multi-paradigm Modelling to  
Process Petri-Nets and Statecharts -- Using Graph Transformation as  
the Semantical Model for Software Process Execution in the APSEE  
Environment -- Graph-Based Reengineering of Telecommunication  
Systems -- Formalising Behaviour Preserving Program Transformations  
-- Unparsing of Diagrams with DiaGen -- Linear Ordered Graph  
Grammars and Their Algebraic Foundations -- Rule Invariants in Graph  
Transformation Systems for Analyzing Safety-Critical Systems --  
Incremental Transformation of Lattices: A Key to Effective Knowledge  
Discovery -- GraCAD – Graph-Based Tool for Conceptual Design -- A  
Formal Semantics of UML State charts by Model Transition Systems --  
Hierarchical Vertex Ordering -- Tutorials and Workshops -- Tutorial  
Introduction to Graph Transformation: A Software Engineering  
Perspective -- Tutorial on DNA Computing and Graph Transformation -  
Computational Nature of Gene Assembly in Ciliates -- TERMGRAPH  
2002 Workshop Survey -- Workshop on Graph-Based Tools --  
Workshop on Graph Transformation and Visual Modeling Techniques --  
Workshop on Software Evolution through Transformations: Towards  
Uniform Support throughout the Software Life-Cycle -- Workshop on  
Logic, Graph Transformations and Discrete Structures.

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#### Sommario/riassunto

ICGT 2002 was the first International Conference on Graph Transformation following a series of six international workshops on graph grammars with applications in computer science, held in Bad Honnef (1978), Osnabrück (1982), Warrenton (1986), Bremen (1990), Williamsburg (1994), and Paderborn (1998). ICGT 2002 was held in Barcelona (Spain), October 7–12, 2002 under the auspices of the European Association of Theoretical Computer Science (EATCS), the European Association of Software Science and Technology (EASST), and the IFIP Working Group 1.3, Foundations of Systems Specification. The scope of the conference concerned graphical structures of various kinds (like graphs, diagrams, visual sentences and others) that are useful to describe complex structures and systems in a direct and intuitive way. These structures are often augmented by formalisms which add to the static description a further dimension, allowing for the modeling of the evolution of systems via all kinds of transformations of such graphical structures. The field of Graph Transformation is concerned with the theory, applications, and implementation issues of such formalisms. The theory is strongly related to areas such as graph theory and graph algorithms, formal language and parsing theory, the theory of concurrent and distributed systems, formal specification and verification, logic, and semantics.

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