1. Record Nr. UNINA9910484650103321

Titolo	Graph transformations : third international conference, ICGT 2006, Natal, Rio Grande do Norte, Brazil, September 17-23, 2006 : proceedings / / Andrea Corradini ... [et al.] (eds.)
Pubbl/distr/stampa	Berlin, : Springer, 2006
ISBN	3-540-38872-9
Edizione	[1st ed. 2006.]
Descrizione fisica	1 online resource (XII, 473 p.)
Collana	Lecture notes in computer science, , 0302-9743 ; ; 4178 LNCS sublibrary. SL 1, Theoretical computer science and general issues
Altri autori (Persone)	CorradiniAndrea <1960->
Disciplina	005.73
Soggetti	Graph grammars Computer science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	International conference proceedings.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Papers -- Nested Quantification in Graph Transformation Rules -- Idioms of Logical Modelling -- New Algorithms and Applications of Cyclic Reference Counting -- New Graph Transformation Models -- Sesqui-Pushout Rewriting -- Automata on Directed Graphs: Edge Versus Vertex Marking -- Conflict Detection for Graph Transformation with Negative Application Conditions -- Adaptive Star Grammars -- Structure Manipulation -- Narrowing Data-Structures with Pointers -- Molecular Analysis of Metabolic Pathway with Graph Transformation -- Matrix Approach to Graph Transformation: Matching and Sequences -- String Generating Hypergraph Grammars with Word Order Restrictions -- Borrowed Contexts and Adhesive Categories -- Composition and Decomposition of DPO Transformations with Borrowed Context -- Process Bisimulation Via a Graphical Encoding -- Toposes Are Adhesive -- Extensions for Distributed and Global Computing -- Graph Transactions as Processes -- Categorical Foundations of Distributed Graph Transformation -- Dynamic Graph Transformation Systems -- Autonomous Units and Their Semantics — The Sequential Case -- Software Engineering Methods and Tools -- Termination Analysis of Model Transformations by Petri Nets -- Non-functional Analysis of Distributed Systems in Unreliable Environments Using Stochastic Object Based Graph Grammars -- Temporal Graph Queries to Support

Software Evolution -- On the Use of Alloy to Analyze Graph Transformation Systems -- Model-Driven Development -- Non-materialized Model View Specification with Triple Graph Grammars -- Model-Driven Monitoring: An Application of Graph Transformation for Design by Contract -- Model View Management with Triple Graph Transformation Systems -- Efficient Implementation -- Graph Transformation in Constant Time -- GrGen: A Fast SPO-Based Graph Rewriting Tool -- Realizing Graph Transformations by Pre- and Postconditions and Command Sequences -- Heuristic Search for the Analysis of Graph Transition Systems -- Logics -- Satisfiability of High-Level Conditions -- Weakest Preconditions for High-Level Programs -- Tutorial and Workshops -- Introductory Tutorial on Foundations and Applications of Graph Transformation -- Workshop on Graph Computation Models -- Workshop on Graph-Based Tools -- Workshop on Petri Nets and Graph Transformations -- 3rd International Workshop on Software Evolution Through Transformations: Embracing Change.

Sommario/riassunto

ICGT 2006 was the 3rd International Conference on Graph Transformation, following the previous two in Barcelona (2002) and Rome (2004), and a series of six international workshops between 1978 and 1998. ICGT 2006 was held in Natal (Rio Grande do Norte, Brazil) on September 17-23, 2006, co-located with the Brazilian Symposium on Formal Methods (SBMF 2006), under the auspices of the BrazilianComputer Society (SBC), the EuropeanAssociation of Software Science and Technology (EASST), the European Association for Theoretical Computer Science (EATCS) and the IFIP WG 1.3 on Foundations of Systems Speci?cation. The conference obtained partial support from Formal Methods Europe and IFIP TC 1 on Foundations of Computer Science. The scope of the conference concerned graphical structures of various kinds (like graphs, diagrams and visual sentences) that are useful when describing complex structures and systems in a direct and intuitive way. These structures are often enriched with formalisms that model their evolution via suitable kinds of transformations. The ?eld of the conference was concerned with the theory, applications, and implementation issues of such formalisms. Particularemphasis wasputonmetamodelswhichcanaccommodateavarietyofgraphicalstructures within the same abstract theory.