Record Nr. UNINA9910143636103321 Applications of Graph Transformations with Industrial Relevance: **Titolo** International Workshop, AGTIVE'99 Kerkrade, The Netherlands, September 1-3, 1999 Proceedings / / edited by Manfred Nagl, Andreas Schürr, Manfred Münch Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2000 **ISBN** 3-540-45104-8 Edizione [1st ed. 2000.] Descrizione fisica 1 online resource (XV, 496 p.) Collana Lecture Notes in Computer Science, , 0302-9743;; 1779 Disciplina 004 Soggetti Optical data processing Pattern recognition **Business** Management science Software engineering Computer logic Mathematical logic Image Processing and Computer Vision Pattern Recognition Business and Management, general Software Engineering Logics and Meanings of Programs Mathematical Logic and Formal Languages Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto Modularization Concepts -- Term Graph Rewriting and Mobile Expressions in Functional Languages -- Graph Transformation Modules and Their Composition -- Modeling Distributed Systems by Modular

Graph Transformation Based on Refinement via Rule Expressions -- Distributed System Modelling -- From UML Descriptions of High-Level Software Architectures to LQN Performance Models -- On a Uniform

Representation of Transformation Systems -- A Note on Modeling Agent Systems by Graph Transformation -- Compositional Construction of Simulation Models Using Graph Grammars -- Software Architectures: Evolution and Reengineering -- Graph-Based Reverse Engineering and Reengineering Tools -- Support for Design Patterns through Graph Transformation Tools -- Conditional Graph Rewriting as a Domain-Independent Formalism for Software Evolution -- Visual Graph Transformation Languages -- Visual Languages: Where Do We Stand? -- From Graph Transformation to Rule-Based Programming with Diagrams -- Using Fujaba for the Development of Production Control Systems -- Visual Language Modeling and Tool Development -- A Formal Definition of Structured Analysis with Programmable Graph Grammars -- Creating Semantic Representations of Diagrams --Defining the Syntax and Semantics of Natural Visual Languages --GENGED A Development Environment for Visual Languages -- Tool Development and Knowledge Modeling in Different Applications --Graph Visualisation in ArchiCAD -- A Combined Graph Schema and Graph Grammar Approach to Consistency in Distributed Modeling --Improving the Publication Chain through High-Level Authoring Support -- Learning and Rewriting in Fuzzy Rule Graphs -- A Proof Tool Dedicated to Clean -- Image Recognition and Constraint Solving --Document Table Recognition by Graph Rewriting -- Image Structure from Monotonic Dual Graph Contraction -- Planning Geometric Constraint Decomposition via Optimal Graph Transformations --Process Modeling and View Integration -- AHEAD: A Graph-Based System for Modeling and Managing Development Processes --Formalizing UML-Based Process Models Using Graph Transformations -- Formal Integration of Software Engineering Aspects Using a Graph Rewrite System - A Typical Experience ?! - -- Towards Integrating Multiple Perspectives by Distributed Graph Transformation --Visualization and Animation Tools -- Graph Algorithm Animation with Grrr -- An L-System-Based Plant Modeling Language -- Tool Demonstrations -- TREEBAG — a Short Presentation -- Tool Support for ViewPoint-Oriented Software Development -- UPGRADE — A Framework for Graph-Based Visual Applications -- Generating Diagram Editors with DiaGen -- PROgrammed Graph REwriting System PROGRES -- Testing and Simulating Production Control Systems Using the Fujaba Environment -- L-Studio/cpfg: A Software System for Modeling Plants -- DiTo — A Distribution Tool Based on Graph Rewriting -- A Demonstration of the Grrr Graph Rewriting Programming Language --AGG: A Tool Environment for Algebraic Graph Transformation --AGTIVE Workshop/Synmposium Panel Discussion on Industrial Relevance of Graph Transformation: The Reality and Our Dreams --Best Presentation and Demonstration Awards.

Sommario/riassunto

This book constitutes the thoroughly refereed post-proceedings of the International Workshop on Graph Transformation with Industrial Relevance, AGTIVE'99, held in Kerkrade, The Netherlands, in June 1999. The 28 revised full papers presented went through an iterated process of reviewing and revision. Also included are three invited papers, 10 tool demonstrations, a summary of a panel discussion, and lists of graph transformation systems and books on graph transformations. The papers are organized in sections on modularization concepts, distributed systems modeling, software architecture: evolution and reengineering, visual graph transformation languages, visual language modeling and tool development, knowledge modeling, image recognition and constraint solving, process modeling and view integration, and visualization and animation tools.