

1. Record Nr.	UNINA9910483120703321
Titolo	Formal methods in software and systems modeling : essays dedicated to Hartmut Ehrig on the occasion of his 60th birthday // Hans-Jorg Kreowski ... [et al.] (eds.)
Pubbl/distr/stampa	Berlin ; ; New York, : Springer, c2005
Edizione	[1st ed. 2005.]
Descrizione fisica	1 online resource (XXVIII, 420 p.)
Collana	Lecture notes in computer science, , 0302-9743 ; ; 3393
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Disciplina	004/01/51
Soggetti	Formal methods (Computer science) Computer software Computers - Design
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	Graph Transformation -- On the Concurrent Semantics of Algebraic Graph Grammars -- From Graph Transformation to Software Engineering and Back -- Flexible Interconnection of Graph Transformation Modules -- Simulating Algebraic High-Level Nets by Parallel Attributed Graph Transformation -- Graph Processes with Fusions: Concurrency by Colimits, Again -- Graph Transformation with Variables -- Graph Transformation in Molecular Biology -- Changing Labels in the Double-Pushout Approach Can Be Treated Categorically -- Algebraic Specification and Logic -- Modules, Brains and Schemas -- From Conditional Specifications to Interaction Charts -- Algebraic Properties of Interfaces -- ? T -Integration of Logics -- Functorial Semantics of Rewrite Theories -- Expander2 -- Relationships Between Equational and Inductive Data Types -- Cofree Coalgebras for Signature Morphisms -- Formal and Visual Modeling -- Nested Constraints and Application Conditions for High-Level Structures -- Synthesis Revisited: Generating Statechart Models from Scenario-Based Requirements -- Main Concepts of Networks of Transformation Units with Interlinking Semantics -- Embeddings and Contexts for Link Graphs -- Towards Architectural Connectors for UML -- Loose Semantics of Petri Nets -- A Formal Framework for the Development of Concurrent Object-Based

Systems -- A Formal Description of the Basic Concepts of System Theory for Transportation.

Sommario/riassunto

By presenting state-of-the-art research results on various aspects of formal and visual modeling of software and systems, this book commemorates the 60th birthday of Hartmut Ehrig. The 24 invited reviewed papers are written by students and collaborators of Hartmut Ehrig who are established researchers in their fields. Reflecting the scientific interest and work of Hartmut Ehrig, the papers fall into three main parts on graph transformation, algebraic specification and logic, and formal and visual modeling.