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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Integration of Software Specification Techniques for Applications in Engineering: Introduction and Overview of Results -- Integration of Software Specification Techniques for Applications in Engineering: Introduction and Overview of Results -- I: Reference Case Study Production Automation -- Basic Principles for Software Specification -- Challenges of Next Generation Manufacturing Systems -- Development of Hierarchical Broadcasting Software Architectures Using UML 2.0 -- An Engineer's Workstation to Support Integrated Development of Flexible Production Control Systems -- A Formal Component Concept for the Specification of Industrial Control Systems -- II: Reference Case Study Traffic Control Systems -- Specification Methodology, Case

Studies, and Experiments – An Introduction to the Subject Area of Traffic Control Systems -- Reference Case Study “Traffic Control Systems” for Comparison and Validation of Formal Specifications Using a Railway Model Demonstrator -- Precise Definition of the Single-Track Level Crossing in Radio-Based Operation in UML Notation and Specification of Safety Requirements -- Executable HybridUML and Its Application to Train Control Systems -- The Use of UML for Development of a Railway Interlocking System -- III: Petri Nets and Related Approaches in Engineering -- Process Description Languages and Methods: Introduction to the Chapter Petri Nets and Related Approaches in Engineering -- Specification and Formal Verification of Temporal Properties of Production Automation Systems -- STOP – Specification Technique of Operational Processes -- Specification and Validation of an Edge Router Discovery Protocol for Mobile Ad Hoc Networks -- A Guide to Modelling and Control with Modules of Signal Nets -- Conceptual Design of an Engineering Model for Product and Plant Automation -- IV: Charts -- to Subject Area “Charts” -- The Rhapsody Semantics of Statecharts (or, On the Executable Core of the UML) -- Interactive Verification of Statecharts -- Live Sequence Charts -- A Unifying Semantics for Sequential Function Charts -- V: Verification -- to Subject Area “Verification” -- “UML–ising” Formal Techniques -- Model Based Formal Verification of Distributed Production Control Systems -- Combining Formal Methods and Safety Analysis – The ForMoSA Approach -- Formal Verification of LSCs in the Development Process -- Verification of PLC Programs Given as Sequential Function Charts -- Modeling and Formal Verification of Production Automation Systems -- VI: Integration Modeling -- On Model Integration and Integration Modelling -- On the Integration of Modular Heterogeneous Specifications -- Semantical Integration of Object-Oriented Viewpoint Specification Techniques.
