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Soggetti	Computer science Computer networks Logic, Symbolic and mathematical Microprocessors Computer architecture Software engineering Theory of Computation Computer Communication Networks Mathematical Logic and Foundations Processor Architectures Software Engineering
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Design, Simulation, and Implementation of Hybrid Systems -- Efficient Reachability Set Generation and Storage Using Decision Diagrams -- Structural Methods to Improve the Symbolic Analysis of Petri Nets -- Stubborn Sets for Standard Properties -- Petri Net Based Behavioural Specification of CORBA Systems -- Symmetric Communication between Coloured Petri Net Simulations and Java-Processes -- Recent Developments in Modeling and Analysis of Hybrid Dynamic Systems -- Autonomous Continuous P/T Systems -- An Approach to the Analysis of Interworking Traders -- Parallel Approaches to the Numerical Transient Analysis of Stochastic Reward Nets -- SWN Nets as a Framework for the Specification and the Analysis of FT Techniques

Adopted in Electric Plant Automation -- Monitoring Discrete Event Systems Using Petri Net Embeddings -- Quasi-Static Scheduling of Embedded Software Using Equal Conflict Nets -- Theoretical Aspects of Recursive Petri Nets -- Petri Net Theory — Problems Solved by Commutative Algebra -- Testing Undecidability of the Reachability in Petri Nets with the Help of 10th Hilbert Problem -- Net Theory and Workflow Models -- Concurrent Implementation of Asynchronous Transition Systems -- Trace Channel Nets -- Reasoning about Algebraic Generalisation of Petri Nets -- The Box Algebra —; A Model of Nets and Process Expressions -- Detection of Illegal Behaviours Based on Unfoldings -- Five Classes of Invariant-Preserving Transformations on Colored Petri Nets -- Verifying Intuition — ILF Checks DAWN Proofs.

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## Sommario/riassunto

This volume contains the proceedings of the 20th International Conference on Application and Theory of Petri Nets. The aim of the Petri net conferences is to create a forum for the dissemination of the latest results in the application and theory of Petri nets. Typically there are some 150-200 participants and usually one third of these come from industry, while the rest are from universities and research institutions. The conferences and a number of other activities are coordinated by a steering committee formed by: G. Balbo (Italy), J. Billington (Australia), C. Girault (France), K. Jensen (Denmark), S. Kumagai (Japan), G. De Michelis (Italy), T. Murata (U.S.A.), C.A. Petri (Germany; honorary member) W. Reisig (Germany), G. Roucairol (France), G. Rozenberg (The Netherlands; chair), M. Silva (Spain). The 1999 Petri net conference took place in Williamsburg, Virginia, and was organized by the Department of Computer Science of The College of William and Mary, Williamsburg. This was the second time the conference had been organized in the United States. We received 45 submissions from 15 countries on 5 continents of which 21 accepted for presentation. The submitted papers were evaluated by a program committee with the following members: W. van der Aalst (The Netherlands), P. Azema (France), W. Brauer (Germany), S. Christensen (Denmark), A. Desrochers (U.S.A.), S. Donatelli (Italy; co-chair), C. Girault (France), L. Gomes (Portugal), J. Hillston (United Kingdom), E.

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