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| Descrizione fisica      | 1 online resource (XVII, 670 p.)   |
| Collana                 | Theoretical Computer Science and General Issues, , 2512-2029 ; ; 5404  |
| Altri autori (Persone)  | NielsenM <1949-> (Mogens)  |
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| Soggetti                | Computer science<br>Database management<br>Computer programming<br>Electronic digital computers - Evaluation<br>Data mining<br>Information storage and retrieval systems<br>Theory of Computation<br>Database Management<br>Programming Techniques<br>System Performance and Evaluation<br>Data Mining and Knowledge Discovery<br>Information Storage and Retrieval  |
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| Formato                 | Materiale a stampa   |
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| Note generali           | Bibliographic Level Mode of Issuance: Monograph  |
| Nota di bibliografia    | Includes bibliographical references and index.   |
| Nota di contenuto       | Invited Talks -- A New Analysis of Expected Revenue -- Can Component/Service-Based Systems Be Proved Correct? -- Probabilistic Acceptors for Languages over Infinite Words -- Automatic Verification of Heap Manipulation Using Separation Logic -- Technology Diffusion in Social Networks -- Service Oriented Architecture Pitfalls -- Algorithms for Solving Infinite Games -- Randomness and Determination, from Physics and Computing towards Biology -- When |

Analysis Fails: Heuristic Mechanism Design via Self-correcting Procedures -- Regular Papers -- On Compositionality, Efficiency, and Applicability of Abstraction in Probabilistic Systems -- Framed Versus Unframed Two-Dimensional Languages -- Approximating Tree Edit Distance through String Edit Distance for Binary Tree Codes -- The Shortcut Problem – Complexity and Approximation -- Green Computing: Energy Consumption Optimized Service Hosting -- On the OBDD Complexity of Threshold Functions and the Variable Ordering Problem -- Natural Specifications Yield Decidability for Distributed Synthesis of Asynchronous Systems -- Epistemic Strategies and Games on Concurrent Processes -- On Finite Bases for Weak Semantics: Failures Versus Impossible Futures -- On Generating All Maximal Acyclic Subhypergraphs with Polynomial Delay -- Time and Fairness in a Process Algebra with Non-blocking Reading -- Expressiveness of Multiple Heads in CHR -- Weaknesses of Cuckoo Hashing with a Simple Universal Hash Class: The Case of Large Universes -- A Framework for Mutant Genetic Generation for WS-BPEL -- Implementing Services by Partial State Machines -- Pattern Matching with Swaps for Short Patterns in Linear Time -- Automatic Bug Detection in Microcontroller Software by Static Program Analysis -- On the Unification of Process Semantics: Observational Semantics -- Factoring and Testing Primes in Small Space -- Adaptive Incentive-Compatible Sponsored Search Auction -- Semantically-Aided Data-Aware Service Workflow Composition -- Increasing Machine Speed in On-Line Scheduling of Weighted Unit-Length Jobs in Slotted Time -- Abstract Storage Devices -- On Stateless Deterministic Restarting Automata -- User Care Preference-Based Semantic Service Discovery in a Ubiquitous Environment -- Safe Reasoning with Logic LTS -- Partial Order Semantics of Types of Nets -- A Problem Kernelization for Graph Packing -- -Hardness of Pure Nash Equilibrium in Scheduling and Connection Games -- Conjunctive Grammars with Restricted Disjunction -- Modelling and Verifying Mobile Systems Using  $\lambda$ -Graphs -- On Some SAT-Variants over Linear Formulas -- The Simple Reachability Problem in Switch Graphs -- Unambiguous Erasing Morphisms in Free Monoids -- An Efficient Symbolic Elimination Algorithm for the Stochastic Process Algebra Tool CASPA -- Asynchronous Deterministic Rendezvous on the Line -- Design Validation by Symbolic Simulation and Equivalence Checking: A Case Study in Memory Optimization for Image Manipulation -- Group Input Machine -- From Outermost Termination to Innermost Termination -- Improved Algorithms for the 2-Vertex Disjoint Paths Problem -- Event-Clock Visibly Pushdown Automata -- A Machine Checked Soundness Proof for an Intermediate Verification Language -- Symbolic State-Space Generation of Asynchronous Systems Using Extensible Decision Diagrams -- Symbolic Reachability Analysis of Integer Timed Petri Nets -- On Toda's Theorem in Structural Communication Complexity -- The Minimum Reload s-t Path/Trail/Walk Problems -- Polylog Space Compression Is Incomparable with Lempel-Ziv and Pushdown Compression -- A New Family of Regular Operators Fitting with the Position Automaton Computation -- A Formal Model of Business Application Integration from Web Services (Position Paper).

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## Sommario/riassunto

This book constitutes the refereed proceedings of the 35th Conference on Current Trends in Theory and Practice of Computer Science, SOFSEM 2009, held in Špindleruv Mlýn, Czech Republic, in January 2009. The 49 revised full papers, presented together with 9 invited contributions, were carefully reviewed and selected from 132 submissions. SOFSEM 2009 was organized around the following four tracks: Foundations of Computer Science; Theory and Practice of Software Services; Game

