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Titolo	Il convito e l'arte tra l'Ottocento e il primo Novecento : [Catanzaro, Complesso Monumentale del San Giovanni, 16 luglio-3 ottobre 2007] / a cura di Francesca Cagianelli, Stefano Fugazza, Dario Matteoni
Pubbl/distr/stampa	Cinisello Balsamo : Silvana Editoriale, 2007
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Soggetti	Computer science Algorithms Machine theory Bioinformatics Artificial intelligence—Data processing Information storage and retrieval systems Theory of Computation Formal Languages and Automata Theory Computational and Systems Biology Data Science Information Storage and Retrieval
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Nota di contenuto	Intro -- Preface -- Organization -- Invited Papers -- Automata and Logics for Concurrent Systems:Five Models in Five Pages -- Resource Automatic Structures for Verificationof Boundedness Properties -- Finite-State Technologyin Natural Language Processing -- Hardware Implementationsof Finite Automata and Regular Expressions -- Contents -- Invited Papers -- Automata and Logics for Concurrent Systems: Five Models in Five Pages -- 1 Introduction -- 2 Finite Automata -- 3 Class Memory Automata -- 4 Nested-Word Automata -- 5 Asynchronous Automata -- 6 Message-Passing Automata -- 7 Conclusion -- References -- Hardware Implementations of Finite Automata and Regular Expressions -- 1 Introduction -- 2 Typical

Solutions -- 2.1 Abstractions -- 2.2 Implementations -- 2.3 Gaps in Current Solutions -- 3 New Implementations -- 4 Ongoing and Future Work -- References -- Regular Papers -- Complexity of Inferring Local Transition Functions of Discrete Dynamical Systems -- 1 Introduction -- 1.1 Motivation -- 1.2 Problems Considered and Summary of Results -- 1.3 Related Work -- 2 Definitions and Problem Formulation -- 2.1 Formal Definition of the SyDS Model -- 2.2 Additional Terminology and Notation -- 2.3 Problem Formulations -- 2.4 Preliminary Results -- 3 Threshold Inference from Homogeneous Behavior Specifications -- 3.1 Inferring Thresholds from Stable Configurations -- 3.2 Inferring Thresholds from Unstable Configurations -- 4 Inference from Heterogeneous Collections of Behavior -- 4.1 The Complexity of ITSUC -- 4.2 Fixed Parameter Tractability of ITSUC -- 5 Future Research Directions -- References -- From Ambiguous Regular Expressions to Deterministic Parsing Automata -- 1 Introduction -- 2 Basic Definitions -- 3 Parser Construction -- 4 Tree and Complexity -- 5 Disambiguation Criteria -- 6 Conclusion -- References.

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3 Lower Bound Techniques for Cover Automata -- 4 Conversions Between Finite Automata and Cover Automata -- 4.1 From Finite Automata to Cover Automata -- 4.2 From Cover Automata to Finite Automata -- 5 Determinization of Finite Cover Automata -- 6 Average Size Comparisons of Finite Cover Automata -- 7 Conclusions -- References -- On the Number of Synchronizing Colorings of Digraphs -- 1 Introduction -- 2 General Statements -- 3 Experimental Investigation of Digraphs -- 3.1 Algorithms -- 3.2 Experimental Results from Exhaustive Enumeration -- 3.3 Experiments on Random Digraphs -- 4 Digraphs with Specific Synchronizing Ratios -- 5 Conclusions and Open Problems -- References -- On the Uniform Random Generation of Non Deterministic Automata Up to Isomorphism

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Oriented Automata -- 4 Discussion -- References -- On the Semantics of Regular Expression Parsing in the Wild -- 1 Introduction -- 2
Definitions -- 3 Converting Regular Expressions into pTr -- 4 A Normal Form for Prioritized Transducers -- 5 Equivalence and Parsing with Prioritized Transducers -- 6 Conclusions and Future Work --
References -- Tool Demonstration Papers -- Introducing Code Adviser: A DFA-driven Electronic Programming Tutor -- 1 Introduction -- 2
How Code Adviser Works -- 3 Acting Intelligent -- 4 One Step Bug Repair -- 5 Discussing Bug Repair -- 6 Code Adviser in Action -- 7
Reflections on Automatic Tutoring -- References -- BSP: A Parsing Tool for Ambiguous Regular Expressions -- 1 Tool Description -- 2 Future Developments -- References -- Author Index.

Sommario/riassunto

This book constitutes the refereed proceedings of the 20th International Conference on Implementation and Application of Automata, CIAA 2015, held in Umeå, Sweden, in August 2015. The 22 revised full papers presented together with 4 invited papers and 2 tool demonstration papers were carefully reviewed and selected from 49 submissions. The papers cover all aspects of automata, counter automata, decision algorithms on automata, descriptive complexity, expressive power of automata, homing sequences, jumping finite automata, multi-dimensional languages, parsing and pattern matching, quantum automata, realtime pushdown automata, random generation of automata, regular expressions, security issues, sensors in automata, transducers, transformation of automata, and weighted automata.
