1. Record Nr. UNINA9910767539703321

Titolo	Logic for Programming, Artificial Intelligence, and Reasoning : 15th International Conference, LPAR 2008, Doha, Qatar, November 22-27, 2008, Proceedings / / edited by Iliano Cervesato, Helmut Veith, Andrei Voronkov
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2008
ISBN	3-540-89439-X
Edizione	[1st ed. 2008.]
Descrizione fisica	1 online resource (XIV, 714 p.)
Collana	Lecture Notes in Artificial Intelligence, , 2945-9141 ; ; 5330
Disciplina	005.115
Soggetti	Artificial intelligence Software engineering Computer programming Computer science Machine theory Artificial Intelligence Software Engineering Programming Techniques Computer Science Logic and Foundations of Programming Formal Languages and Automata Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	International conference proceedings.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Session 1. Constraint Solving -- Symmetry Breaking for Maximum Satisfiability -- Efficient Generation of Unsatisfiability Proofs and Cores in SAT -- Justification-Based Local Search with Adaptive Noise Strategies -- The Max-Atom Problem and Its Relevance -- Session 2. Knowledge Representation 1 -- Towards Practical Feasibility of Core Computation in Data Exchange -- Data-Oblivious Stream Productivity -- Reasoning about XML with Temporal Logics and Automata -- Distributed Consistency-Based Diagnosis -- Session 3. Proof-Theory 1 -- From One Session to Many: Dynamic Tags for Security Protocols -- A Conditional Logical Framework -- Nominal Renaming Sets -- Imogen: Focusing the Polarized Inverse Method for Intuitionistic Propositional

Logic -- Invited Talk -- Model Checking – My 27-Year Quest to Overcome the State Explosion Problem -- Session 4. Automata -- On the Relative Succinctness of Nondeterministic Büchi and co-Büchi Word Automata -- Recurrent Reachability Analysis in Regular Model Checking -- Alternation Elimination by Complementation (Extended Abstract) -- Discounted Properties of Probabilistic Pushdown Automata -- Session 5. Linear Arithmetic -- A Quantifier Elimination Algorithm for Linear Real Arithmetic -- (LIA) - Model Evolution with Linear Integer Arithmetic Constraints -- A Constraint Sequent Calculus for First-Order Logic with Linear Integer Arithmetic -- Encoding Queues in Satisfiability Modulo Theories Based Bounded Model Checking -- Session 6. Verification -- On Bounded Reachability of Programs with Set Comprehensions -- Program Complexity in Hierarchical Module Checking -- Valigator: A Verification Tool with Bound and Invariant Generation -- Reveal: A Formal Verification Tool for Verilog Designs -- Invited Talks -- A Formal Language for Cryptographic Pseudocode -- Reasoning UsingKnots -- Session 7. Knowledge Representation 2 -- Role Conjunctions in Expressive Description Logics -- Default Logics with Preference Order: Principles and Characterisations -- On Computing Constraint Abduction Answers -- Fast Counting with Bounded Treewidth -- Session 8. Proof-Theory 2 -- Cut Elimination for First Order Gödel Logic by Hyperclause Resolution -- Focusing Strategies in the Sequent Calculus of Synthetic Connectives -- An Algorithmic Interpretation of a Deep Inference System -- Weak ??-Normalization and Normalization by Evaluation for System F -- Session 9. Quantified Constraints -- Variable Dependencies of Quantified CSPs -- Treewidth: A Useful Marker of Empirical Hardness in Quantified Boolean Logic Encodings -- Tractable Quantified Constraint Satisfaction Problems over Positive Temporal Templates -- A Logic of Singly Indexed Arrays -- Session 10. Modal and Temporal Logics -- On the Computational Complexity of Spatial Logics with Connectedness Constraints -- Decidable and Undecidable Fragments of Halpern and Shoham’s Interval Temporal Logic: Towards a Complete Classification -- The Variable Hierarchy for the Lattice ?-Calculus -- A Formalised Lower Bound on Undirected Graph Reachability -- Session 11. Rewriting -- Improving Context-Sensitive Dependency Pairs -- Complexity, Graphs, and the Dependency Pair Method -- Uncurrying for Termination -- Approximating Term Rewriting Systems: A Horn Clause Specification and Its Implementation -- A Higher-Order Iterative Path Ordering -- Variable Dependencies of Quantified CSPs.

Sommario/riassunto

This book constitutes the refereed proceedings of the 15th International Conference on Logic for Programming, Artificial Intelligence, and Reasoning, LPAR 2008, which took place in Doha, Qatar, during November 22-27, 2008. The 45 revised full papers presented together with 3 invited talks were carefully revised and selected from 153 submissions. The papers address all current issues in automated reasoning, computational logic, programming languages and their applications and are organized in topical sections on automata, linear arithmetic, verification knowledge representation, proof theory, quantified constraints, as well as modal and temporal logics.