1. Record Nr. UNISA996465320703316

Titolo	Logic for Programming, Artificial Intelligence, and Reasoning [[electronic resource]] : 8th International Conference, LPAR 2001, Havana, Cuba, December 3-7, 2001, Proceedings / / edited by Robert Nieuwenhuis, Andrei Voronkov
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2001
ISBN	3-540-45653-8
Edizione	[1st ed. 2001.]
Descrizione fisica	1 online resource (XV, 741 p.)
Collana	Lecture Notes in Artificial Intelligence ; ; 2250
Disciplina	006.3
Soggetti	Artificial intelligence Software engineering Computer logic Mathematical logic Artificial Intelligence Software Engineering/Programming and Operating Systems Logics and Meanings of Programs Software Engineering Mathematical Logic and Formal Languages
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Talk -- Monodic Fragments of First-Order Temporal Logics: 2000–2001 A.D. -- Verification -- On Bounded Specifications -- Improving Automata Generation for Linear Temporal Logic by Considering the Automaton Hierarchy -- Local Temporal Logic Is Expressively Complete for Cograph Dependence Alphabets -- Guarded Logics -- Games and Model Checking for Guarded Logics -- Computational Space Efficiency and Minimal Model Generation for Guarded Formulae -- Agents -- Logical Omniscience and the Cost of Deliberation -- Local Conditional High-Level Robot Programs -- A Refinement Theory that Supports Reasoning about Knowledge and Time for Synchronous Agents -- Automated Theorem Proving -- Proof and Model Generation with Disconnection Tableaux -- Counting the

Number of Equivalent Binary Resolution Proofs -- Automated Theorem Proving -- Splitting through New Proposition Symbols -- Complexity of Linear Standard Theories -- Herbrand's Theorem for Prenex Gödel Logic and Its Consequences for Theorem Proving -- Non-classical Logics -- Unification in a Description Logic with Transitive Closure of Roles -- Intuitionistic Multiplicative Proof Nets as Models of Directed Acyclic Graph Descriptions -- Types -- Coherence and Transitivity in Coercive Subtyping -- A Type-Theoretic Approach to Induction with Higher-Order Encodings -- Analysis of Polymorphically Typed Logic Programs Using ACI-Unification -- Experimental Papers -- Model Generation with Boolean Constraints -- First-Order Atom Definitions Extended -- Automated Proof Support for Interval Logics -- Foundations of Logic -- The Functions Provable by First Order Abstraction -- A Local System for Classical Logic -- CSP and SAT -- Partial Implicit Unfolding in the Davis-Putnam Procedure for Quantified Boolean Formulae -- Permutation Problems and Channelling Constraints -- Simplifying Binary Propositional Theories into Connected Components Twice as Fast -- Non-monotonic Reasoning -- Reasoning about Evolving Nonmonotonic Knowledge Bases -- Efficient Computation of the Well-Founded Model Using Update Propagation -- Semantics -- Indexed Categories and Bottom-Up Semantics of Logic Programs -- Functional Logic Programming with Failure: A Set-Oriented View -- Operational Semantics for Fixed-Point Logics on Constraint Databases -- Experimental Papers -- Efficient Negation Using Abstract Interpretation -- Certifying Synchrony for Free -- A Computer Environment for Writing Ordinary Mathematical Proofs -- Termination -- On Termination of Meta-programs -- A Monotonic Higher-Order Semantic Path Ordering -- Knowledge-Based Systems -- The Elog Web Extraction Language -- Census Data Repair: A Challenging Application of Disjunctive Logic Programming -- Analysis of Logic Programs -- Boolean Functions for Finite-Tree Dependencies -- How to Transform an Analyzer into a Verifier -- Andorra Model Revised: Introducing Nested Domain Variables and a Targeted Search -- Databases and Knowledge Bases -- Coherent Composition of Distributed Knowledge-Bases through Abduction -- Tableaux for Reasoning about Atomic Updates -- Termination -- Inference of Termination Conditions for Numerical Loops in Prolog -- Termination of Rewriting with Strategy Annotations -- Inferring Termination Conditions for Logic Programs Using Backwards Analysis -- Program Analysis and Proof Planning -- Reachability Analysis of Term Rewriting Systems with Timbuk -- Binding-Time Annotations without Binding-Time Analysis -- Concept Formation via Proof Planning Failure.

Sommario/riassunto

This volume contains the papers presented at the Eighth International C- ference on Logic for Programming, Arti?cial Intelligence and Reasoning (LPAR 2001), held on December 3-7, 2001, at the University of Havana (Cuba), together with the Second International Workshop on Implementation of Logics. There were 112 submissions, of which 19 belonged to the special subm- sion category of experimental papers, intended to describe implementations or comparisons of systems, or experiments with systems. Each submission was - viewed by at least three program committee members and an electronic program committee meeting was held via the Internet. The high number of submissions caused a large amount of work, and we are very grateful to the other 31 PC members for their e?ciency and for the quality of their reviews and discussions. Finally, the committee decided to accept 40papers in the theoretical ca- gory, and 9 experimental papers. In addition to the refereed papers, this volume contains an extended abstract of the invited talk by Frank Wolter. Two other invited lectures

were given by Matthias Baaz and Manuel Hermenegildo. Apart from the program committee, we would also like to thank the other people who made LPAR 2001 possible: the additional referees; the Local Arran- ` gements Chair Luciano Garc´?a; Andr´es Navarro and Oscar Guell, ¨ who ran the internet-based submission software and the program committee discussion so- ware at the LSI Department lab in Barcelona; and Bill McCune, whose program committee management software was used.