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Collana	Lecture Notes in Artificial Intelligence ; ; 8562
Disciplina	004.015113
Soggetti	Mathematical logic Computer logic Artificial intelligence Software engineering Computer science—Mathematics Numerical analysis Mathematical Logic and Formal Languages Logics and Meanings of Programs Artificial Intelligence Software Engineering Mathematics of Computing Numeric Computing
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Formato	Materiale a stampa
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Nota di contenuto	From Reachability to Temporal Specifications in Cost-Sharing Games -- Electronic Voting: How Logic Can Help -- And-Or Tableaux for Fix point Logics with Converse: LTL, CTL, PDL and CPDL -- Unified Classical Logic Completeness: A Coinductive Pearl -- A Focused Sequent Calculus for Higher-Order Logic -- SAT-Based Decision Procedure for Analytic Pure Sequent Calculi -- A Unified Proof System for QBF Pre processing -- The Fractal Dimension of SAT Formulas -- A Gentle Non-disjoint Combination of Satisfiability Procedures -- A

Rewriting Strategy to Generate Prime Implicates in Equational Logic --  
Finite Quantification in Hierarchic Theorem Proving -- Computing All  
Implied Equalities via SMT-Based Partition Refinement -- Proving  
Termination of Programs Automatically with A Pro VE -- Locality  
Transfer: From Constrained Axiomatizations to Reachability Predicates  
-- Proving Termination and Memory Safety for Programs with Pointer  
Arithmetic -- QBF Encoding of Temporal Properties and QBF-Based  
Verification -- Introducing Quantified Cuts in Logic with Equality --  
Quati: An Automated Tool for Proving Permutation Lemmas -- A  
History-Based Theorem Prover for Intuitionistic Propositional Logic  
Using Global Caching: IntHistGC System Description -- M lean CoP: A  
Connection Prover for First-Order Modal Logic -- Optimal Tableau-  
Based Decision Procedure for Testing Satisfiability in the Alternating-  
Time Temporal Logic ATL+ -- dTL2: Differential Temporal Dynamic  
Logic with Nested Temporalities for Hybrid Systems -- Axioms vs  
Hypersequent Rules with Context Restrictions: Theory and Applications  
-- Clausal Resolution for Modal Logics of Confluence -- Implementing  
Tableau Calculi Using BDDs: BDDTab System Description --  
Approximations for Model Construction -- A Tool That Incrementally  
Approximates Finite Satisfiability in Full Interval Temporal Logic --  
StarExec: A Cross-Community Infrastructure for Logic -- Skeptik: A  
Proof Compression System -- Terminating Minimal Model Generation  
Procedures for Propositional Modal Logics -- Cool – A Generic Reasoner  
for Coalgebraic Hybrid Logics (System Description) -- The Complexity  
of Theorem Proving in Circumscription and Minimal Entailment --  
Visibly Linear Temporal Logic -- Count and Forget: Uniform  
Interpolation of SHQ- Ontologies -- Coupling Tableau Algorithms for  
Expressive Description Logics with Completion-Based Saturation  
Procedures -- EL-ifying Ontologies -- The Bayesian Description Logic  
BEL -- OTTER Proofs in Tarskian Geometry -- NESCOND: An  
Implementation of Nested Sequent Calculi for Conditional Logics --  
Knowledge Engineering for Large Ontologies with Sigma KEE 3.0.

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## Sommario/riassunto

This book constitutes the refereed proceedings of the 7th International Joint Conference on Automated Reasoning, IJCAR 2014, held as part of the Vienna Summer of Logic, VSL 2014, in Vienna, Austria, in July 2014. IJCAR 2014 was a merger of three leading events in automated reasoning, namely CADE (International Conference on Automated Deduction), FroCoS (International Symposium on Frontiers of Combining Systems) and TABLEAUX (International Conference on Automated Reasoning with Analytic Tableaux and Related Methods). The 26 revised full research papers and 11 system descriptions presented together with 3 invited talks were carefully reviewed and selected from 83 submissions. The papers have been organized in topical sections on HOL, SAT and QBF, SMT, equational reasoning, verification, proof theory, modal and temporal reasoning, SMT and SAT, modal logic, complexity, description logics and knowledge representation and reasoning.

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