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Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 1289
Disciplina	511.3
Soggetti	Logic, Symbolic and mathematical Programming languages (Electronic computers) Artificial intelligence Algorithms Mathematical Logic and Foundations Programming Languages, Compilers, Interpreters Artificial Intelligence Mathematical Logic and Formal Languages Algorithm Analysis and Problem Complexity
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Formato	Materiale a stampa
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Nota di contenuto	Paramodulation, superposition, and simplification -- Explaining Gentzen's consistency proof within infinitary proof theory -- Alogtime algorithms for tree isomorphism, comparison, and canonization -- Ultrafilter logic and generic reasoning -- Informal rigor and mathematical understanding -- Resolution, inverse method and the sequent calculus -- Subtyping over a lattice (abstract) -- A new method for bounding the complexity of modal logics -- Parameter free induction and reflection -- Looking for an analogue of Rice's Theorem in circuit complexity theory -- Two connections between Linear Logic and ?ukasiewicz Logics -- Structuring of computer-generated proofs by cut introduction -- NaDSyL and some applications -- Markov's rule is admissible in the set theory with intuitionistic logic -- Bounded hyperset theory and web-like data bases -- Invariant definability --

Comparing computational representations of Herbrand models -- Restart tableaux with selection function -- Two semantics and logics based on the Gödel interpretation -- On the completeness and decidability of a restricted first order linear temporal logic -- Propositional quantification in intuitionistic logic -- Sketch-as-proof -- Translating set theoretical proofs into type theoretical programs -- Denotational semantics for polarized (but-non-constrained) LK by means of the additives -- The undecidability of simultaneous rigid E-unification with two variables -- The tangibility reflection principle for self-verifying axiom systems -- Upper bounds for standardizations and an application.

Sommario/riassunto

This book constitutes the refereed proceedings of the 5th Kurt Gödel Colloquium on Computational Logic and Proof Theory, KGC '97, held in Vienna, Austria, in August 1997. The volume presents 20 revised full papers selected from 38 submitted papers. Also included are seven invited contributions by leading experts in the area. The book documents interdisciplinary work done in the area of computer science and mathematical logics by combining research on provability, analysis of proofs, proof search, and complexity.