Record Nr. UNISA996466124103316 Artificial Intelligence and Symbolic Computation [[electronic resource]] **Titolo** : International Conference AISC'98, Plattsburgh, New York, USA, September 16-18, 1998, Proceedings / / edited by Jacques Calmet, Jan Plaza Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1998 **ISBN** 3-540-49816-8 Edizione [1st ed. 1998.] Descrizione fisica 1 online resource (XII, 316 p.) Collana Lecture Notes in Artificial Intelligence;; 1476 Disciplina 006.3 Soggetti Artificial intelligence Computers Computer science—Mathematics Mathematical logic Algorithms Artificial Intelligence Theory of Computation Symbolic and Algebraic Manipulation Mathematical Logic and Formal Languages Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto An inductive logic programming query language for database mining --Bertrand Russell, Herbrand's theorem, and the assignment statement -- Representing and reasoning with context -- From integrated reasoning specialists to "plug-and-play? reasoning components --Reasoning about coding theory: The benefits we get from computer algebra -- Automatic generation of epsilon-delta proofs of continuity -- Finite model search for equational theories (FMSET) -- Specification and integration of theorem provers and computer algebra systems --COLETTE, prototyping CSP solvers using a rule-based language -- An evolutionary algorithm for welding task sequence ordering --Intuitionistic proof transformations and their application to constructive

program synthesis -- Combining algebraic computing and term-

rewriting for geometry theorem proving -- Cooperation between top-down and bottom-up theorem provers by subgoal clause transfer -- Polymorphic call-by-value calculus based on classical proofs -- Inference and verification in Medical Appropriateness Criteria using Gröbner Bases -- The unification problem for one relation Thue Systems -- Basic Completion with E-cycle Simplification -- SoleX: A domain-independent scheme for constraint solver extension -- Optimising propositional modal satisfiability for description logic subsumption -- Instantiation of existentially quantified variables in inductive specification proofs -- Knowledge discovery objects and queries in Distributed Knowledge Systems -- ALLTYPES: An algebraic language and TYPE system -- Real parametrization of algebraic curves -- Non-clausal reasoning with propositional definite theories.

## Sommario/riassunto

This book constitutes the refereed proceedings of the International Conference on Artificial Intelligence and Symbolic Computation, AISC'98, held in Plattsburgh, NY, in September 1998. The 24 revised full papers presented were carefully selected for inclusion in the book. The papers address various aspects of symbolic computation and formal reasoning such as inductive logic programming, context reasoning, computer algebra, proof theory and theorem proving, term rewriting, algebraic manipulation, formal verification, constraint solving, and knowledge discovery.