1. Record Nr. UNISA996465858403316

Titolo	Artificial Intelligence and Symbolic Mathematical Computation [[electronic resource]] : International Conference, AISMC-3, Steyr, Austria, September, 23 - 25, 1996. Proceedings / / edited by Jaques Calmet, John A. Campbell, Jochen Pfalzgraf
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1996
ISBN	3-540-70740-9
Edizione	[1st ed. 1996.]
Descrizione fisica	1 online resource (VIII, 384 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 1138
Disciplina	006.3/01/5113
Soggetti	Artificial intelligence Computers Computer science—Mathematics Algorithms Mathematical logic Computational complexity Artificial Intelligence Theory of Computation Symbolic and Algebraic Manipulation Mathematical Logic and Formal Languages Complexity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Symbolic computation and teaching -- Analytica — An experiment in combining theorem proving and symbolic computation -- Document recognition, semantics, and symbolic reasoning in reverse engineering of software -- Compromised updates in labelled databases -- An inference engine for propositional two-valued logic based on the radical membership problem -- Programming by demonstration: A machine learning approach to support skill acquision for robots -- Knowledge-based information processing in manufacturing cells — The present and the future -- Calculi for qualitative spatial reasoning -- Combining local consistency, symbolic rewriting and interval methods

-- Proof transformation for non-compatible rewriting -- PATCH Graphs: An efficient data structure for completion of finitely presented groups -- Measuring the likely effectiveness of strategies -- A new approach on solving 3-satisfiability -- Geometry machines: From AI to SMC -- Interactive Theorem Proving and finite projective planes -- Towards modelling the topology of homogeneous manifolds by means of symbolic computation -- Solving geometrical constraint systems using CLP based on linear constraint solver -- Towards a sheaf semantics for cooperating agents scenarios -- Data types in subdefinite models -- On theorem-proving in Horn theories with built-in algebras -- Backward reasoning in systems with cut -- Soundness and completeness versus lifting property -- Reasoning with preorders and dynamic sorts using free variable tableaux.

Sommario/riassunto

This book constitutes the refereed proceedings of the Third International Conference on Artificial Intelligence and Symbolic Mathematical Computation, AISMC-3, held in Steyr, Austria, in September 1996. The 19 revised full papers presented in the book were carefully selected by the program committee; also included are four invited survey and state-of-the-art contributions by Scott, Dillmann and Friedrich, Cohn, and Wang. Among the topics addressed are theorem proving, rewriting systems, symbolic computation, spatial reasoning, computational geometry, and automated deduction.