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Disciplina	005.115
Soggetti	Software engineering Computer logic Computer programming Logic, Symbolic and mathematical Artificial intelligence Software Engineering/Programming and Operating Systems Logics and Meanings of Programs Programming Techniques Mathematical Logic and Formal Languages Artificial Intelligence
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Formato	Materiale a stampa
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Invited Talk -- Inductive Theorem Proving by Program Specialisation: Generating Proofs for Isabelle Using Ecce -- Specification and Synthesis -- Predicate Synthesis from Inductive Proof Attempt of Faulty Conjectures -- Correct OO Systems in Computational Logic -- Specification and Synthesis of Hybrid Automata for Physics-Based Animation -- Adding Concrete Syntax to a Prolog-Based Program Synthesis System -- Verification -- Formal Development and Verification of Approximation Algorithms Using Auxiliary Variables -- Formal Reasoning about Efficient Data Structures: A Case Study in ACL2

-- Analysis -- A Program Transformation for Backwards Analysis of Logic Programs -- An Efficient Staging Algorithm for Binding-Time Analysis -- Proving Termination with Adornments -- Transformation and Specialisation -- Constructively Characterizing Fold and Unfold -- Deterministic Higher-Order Patterns for Program Transformation -- From Interpreter to Logic Engine by Defunctionalization -- Linearization by Program Transformation -- Continuation Semantics as Horn Clauses -- Constraints -- Simplification of Database Integrity Constraints Revisited: A Transformational Approach -- Integration and Optimization of Rule-Based Constraint Solvers -- Introducing esra, a Relational Language for Modelling Combinatorial Problems.

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Sommario/riassunto

This volume contains selected papers from LOPSTR 2003, the 13th International Symposium on Logic-Based Program Synthesis and Transformation. The LOPSTR series is devoted to research in logic-based program development. Particular topics of interest are specification, synthesis, verification, transformation, specialization, analysis, optimization, composition, reuse, component-based software development, agent-based software development, software architectures, design patterns and frameworks, program refinement and logics for refinement, proofs as programs, and applications and tools. LOPSTR 2003 took place at the University of Uppsala from August 25 to August 27 as part of PLI 2003 (Principles, Logics, and Implementations of High-Level Programming Languages). PLI was an ACM-organized confederation of conferences and workshops with ICFP 2003 (ACM-SIGPLAN International Conference on Functional Programming) and PPDP 2003 (ACM-SIGPLAN International Conference on Principles and Practice of Declarative Programming) as the main events. The LOPSTR community profited from the shared lectures of the invited speakers, and the active scientific discussions enabled by the co-location. LOPSTR 2003 was the thirteenth in a series of events. Past events were held in Manchester, UK (1991, 1992, 1998), Louvain-la-Neuve, Belgium (1993), Pisa, Italy (1994), Arnhem, The Netherlands (1995), Stockholm, Sweden (1996), Leuven, Belgium (1997), Venice, Italy (1999), London, UK (2000), Paphos, Cyprus (2001), and Madrid, Spain (2002).

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