Record Nr. UNINA9910144129303321 Logic-Based Program Synthesis and Transformation: 9th International **Titolo** Workshop, LOPSTR'99, Venice, Italy, September 22-24, 1999 Selected Papers / / edited by Annalisa Bossi Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa . 2000 **ISBN** 3-540-45148-X Edizione [1st ed. 2000.] 1 online resource (VII, 312 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743;; 1817 Collana 005.1/15 Disciplina Soggetti Software engineering Computer logic Computer programming Artificial intelligence Logic, Symbolic and mathematical Software Engineering/Programming and Operating Systems Logics and Meanings of Programs **Programming Techniques** Artificial Intelligence Mathematical Logic and Formal Languages Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Invited Talk -- Algebraic Specification and Program Development by Stepwise Refinement -- Tutorials -- Proof Obligations of the B Formal Method: Local Proofs Ensure Global Consistency -- Constraint Logic Programming Applied to Model Checking -- Software Development --On Dynamic Aspects of OOD Frameworks in Component-Based Software Development in Computational Logic -- Analysis and Specialisation -- Infinite State Model Checking by Abstract Interpretation and Program Specialisation -- Mode Analysis Domains for Typed Logic Programs -- Imperative Program Specialisation: An Approach Using CLP -- Specialising Finite Domain Programs Using Polyhedra -- Transformation -- Roles of Program Extension --

Transformation of Left Terminating Programs -- Transformation Rules

for Logic Programs with Goals as Arguments -- Making Mercury Programs Tail Recursive -- The Replacement Operation for CCP Programs -- Verification -- Annotations for Prolog – A Concept and Runtime Handling -- Verification by Testing for Recursive Program Schemes -- Combined Static and Dynamic Assertion-Based Debugging of Constraint Logic Programs -- Context-Moving Transformations for Function Verification.

Sommario/riassunto

This volume contains the proceedings of the ninth international workshop on logic-based program synthesis and transformation (LOPSTR'99) which was held in Venice (Italy), September 22-24, 1999. LOPSTRistheannualworkshopandforumforresearchersinthelogic-based program development stream of computational logic. The main focus used to be on synthesis and transformation of logic programs, but the workshop is open to contributions on logic-based program development in any paradigm. Previous workshops were held in Manchester, UK (1991, 1992), Louvain-la-Neuve, B- gium (1993), Pisa, Italy (1994), Arnhem, The Netherlands (1995), Stockholm, Sweden (1996), Leuven, Belgium (1997), and Manchester, UK (1998). LOPSTR is a real workshop in the sense that it is a friendly and lively forum for presenting recent and current research as well as discussing future trends. Formal proceedings of the workshop are produced only after the workshop and contain only those papers selected by the program committee after a second refereeing process. The program committee of LOPSTR'99 accepted 20 extended abstracts for presentation at the workshop; then selected 14 papers for inclusion in the po-workshop proceedings. Selected papers cover all the main streams of LOPSTR's topics: synthesis, specialization, transformation, analysis, and veri? cation. Ve-?cation, transformation, and specialization methods are applied to functional, constraint, logic, and imperative programming.