1. Record Nr. UNISA996466135403316

Titolo Algebraic methodology and software technology: 7th International

Conference, AMAST '99, Amazonia, Brazil, January 4-8, 1999:

proceedings / / Armando Martiln Haeberer (editor)

Pubbl/distr/stampa Berlin; ; Heidelberg:,: Springer,, [1999]

©1999

ISBN 3-540-49253-4

Edizione [1st ed. 1999.]

Descrizione fisica 1 online resource (XII, 540 p.)

Collana Lecture Notes in Computer Science, , 0302-9743 ; ; 1548

Disciplina 005.1

Soggetti Software engineering

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 at the end of each chapters and

index.

Nota di contenuto Invited Talks (Extended Abstracts) -- Duration Calculus, a Logical

Approach to Real-Time Systems -- Abstract Algebraic Logic -- Systematising Reactive System Design -- Systematic Design of Call-Coverage Features -- Visual Abstractions for Temporal Verification -- A Linear Metalanguage for Concurrency -- Presentations -- Verification of Bounded Delay Asynchronous Circuits with Timed Traces --

Verification of Temporal Properties of Processes in a Setting with Data -- A Logic for Real-Time Systems Specification Its Algebraic Semantics and Equational Calculus -- Effective Recognizability and Model Checking of Reactive Fiffo Automata -- Combining Methods for the Livelock Analysis of a Fault-Tolerant System -- Presentations --

Separating Sets by Modal Formulas -- Interpolation in Modal Logic -- Building Models of Linear Logic -- Term Rewriting in a Logic of Special Relations -- Abstraction Barriers in Equational Proof -- Presentations -- A Synergy Between Model-Checking and Type Inference for the Verification of Value-Passing Higher-Order Processes -- A Trace-Based

Refinement Calculus for Shared-Variable Parallel Programs --

Consistency of Partial Process Specifications -- Observational Logic -- Scheduling Algebra -- Presentations -- Algebraic Semantics of

Coordination or What Is in a Signature -- An Algebraic Approach to

Combining Processes in a Hardware/Software Partitioning Environment

-- An Algebraic View of Program Composition -- Architectural Specifications in CASL -- Pi-Congruences as CCS Equivalences -- Presentations -- Algebraic Specifications, Higher-Order Types and Set-Theoretic Models -- Type Analysis for CHIP -- Categorical Programming with Abstract Data Types -- Condensing Lemmas for Pure Type Systems with Universes -- Improving Computations in a Typed Functional Logic Language -- Presentations -- Abstract Interpretation of Prolog Programs -- Factorizing Equivalent Variable Pairs in ROBDD-Based Implementations of Pos -- A Single Perspective on Arrows between Institutions -- On Oracles for Interpreting Test Results against Algebraic Specifications -- Systems and Tool Demonstrations -- Recopla: An Extendible Graphic Meta-Editor -- The State of PEP -- The Abaco System — An Algebraic Based Action COmpiler.

Sommario/riassunto

AMAST's goal is to advance awareness of algebraic and logical methodology as part of the fundamental basis of software technology. Ten years and seven conferences after the start of the AMAST movement, I believe we are attaining this. The movement has propagated throughout the world, assembling many enthusiastic specialists who have participated not only in the conferences, which are now annual, but also in the innumerable other activities that AMAST promotes and supports. We are now facing the Seventh International Conference on Algebraic Methodology and Software Technology (AMAST'98). The previous meetings were held in Iowa City, USA (1989) and 1991), in Enschede, The Netherlands (1993), in Montreal, Canada (1995), in Munich, Germany (1996), and in Sydney, Australia (1997). This time it is Brazil's turn, in a very special part of this colorful country - Amazonia. Thus, "if we have done more it is by standing on the shoulders of giants." The effort started by Teodor Rus, Arthur Fleck, and William A. Kirk at AMAST'89 was consolidated in AMAST'91 by Teodor Rus, Maurice Nivat, Charles Rattray, and Giuseppe Scollo. Then came modular construction of the building, wonderfully carried out by Giuseppe Scollo, Vangalur Alagar, Martin Wirsing, and Michael Johnson, as Program Chairs of the AMAST conferences held between 1993 and 1997.