

Table of Contents

Invited Talks

Validation of Synchronous Reactive Systems: From Formal Verification to Automatic Testing	1
<i>N. Halbwachs, P. Raymond</i>	
Emerging Application Domains and the Computing Fabric	13
<i>K. V. Palem</i>	

Regular Papers

The Game of the Name in Cryptographic Tables	15
<i>R. M. Amadio, S. Prasad</i>	
A Parallel Approximation Algorithm for the Max Cut Problem on Cubic Graphs	27
<i>T. Calamoneri, I. Finocchi, Y. Manoussakis, R. Petreschi</i>	
Rapid Prototyping Techniques for Fuzzy Controllers	37
<i>C. Chantrapornchai, S. Tongsimma, E. Sha</i>	
Transactional Cache Management with Aperiodic Invalidation Scheme in Mobile Environments	50
<i>I. Chung, C.-S. Hwang</i>	
Observable Sharing for Functional Circuit Description	62
<i>K. Claessen, D. Sands</i>	
Relating May and Must Testing Semantics for Discrete Timed Process Algebras	74
<i>L. F. L. Díaz, D. de Frutos Escrig</i>	
A Framework for Formal Reasoning about Open Distributed Systems	87
<i>L.-å. Fredlund, D. Gurov</i>	
Structural Sharing and Efficient Proof-Search in Propositional Intuitionistic Logic	101
<i>D. Galmiche, D. Larchey-Wendling</i>	
Verifying Probabilistic Programs Using a Hoare like Logic	113
<i>J. I. den Hartog</i>	
An Expressive Extension of TLC	126
<i>J. G. Henriksen</i>	

Completeness and Decidability of a Fragment of Duration Calculus with Iteration	139
<i>D. V. Hung, D. P. Guelev</i>	
Logical Relations in Circuit Verification	151
<i>M. Indrika</i>	
Lemma Generalization and Non-unit Lemma Matching for Model Elimination	163
<i>K. Iwanuma, K. Kishino</i>	
On Automating Inductive and Non-inductive Termination Methods	177
<i>F. Kamareddine, F. Monin</i>	
Asynchronous Links in the PBC and M-Nets	190
<i>H. Klaudel, F. Pommereau</i>	
Demand-Driven Model Checking for Context-Free Processes	201
<i>J. Knoop</i>	
Programming the Mobility Behaviour of Agents by Composing Itineraries .	214
<i>S. W. Loke, H. Schmidt, A. Zaslavsky</i>	
Faster Model Checking for Open Systems	227
<i>M. Mukund, K. N. Kumar, S. A. Smolka</i>	
An Argumentation Approach to Semantics of Declarative Programs with Defeasible Inheritance	239
<i>E. Nantajeewarawat, V. Wuwongse</i>	
Entailment of Non-structural Subtype Constraints	251
<i>J. Niehren, T. Priesnitz</i>	
A CPS-Transform of Constructive Classical Logic	266
<i>I. Ogata</i>	
Formal Verification of the MCS List-Based Queuing Lock	281
<i>K. Ogata, K. Futatsugi</i>	
BDD-Nodes Can Be More Expressive	294
<i>F. Reffel</i>	
Formal Verification of Descriptions with Distinct Order of Memory Operations	308
<i>G. Ritter, H. Hinrichsen, H. Eveking</i>	
Beyond Tamaki-Sato Style Unfold/Fold Transformations for Normal Logic Programs	322
<i>A. Roychoudhury, K. N. Kumar, C. R. Ramakrishnan, I. V. Ramakrishnan</i>	

On $L^k(Q)$ Types and Boundedness of $IFP(Q)$ on Finite Structures	334
<i>A. Seth</i>	
Separators Are as Simple as Cutsets	347
<i>H. Shen, K. Li, S.-Q. Zheng</i>	
Ant Colony Optimization for the Ship Berthing Problem	359
<i>C. J. Tong, H. C. Lau, A. Lim</i>	
Poster Session Abstracts	
Security Modeling and Evaluation for the Mobile Code Paradigm	371
<i>A. H. W. Chan, M. R. Lyu</i>	
CASA - Structured Design of a Specification Language for Intelligent Agents	373
<i>S. Flake, C. Geiger</i>	
An Efficient Location Management by Optimal Location Area Partitioning in PCS Networks	375
<i>J.-M. Gil, C.-S. Hwang</i>	
Programming with Explicit Regions	377
<i>K. Kagawa</i>	
A Verification Technique Based on Syntactic Action Refinement in a TCSP-like Process Algebra and the Hennessy-Milner-Logic	379
<i>M. Majster-Cederbaum, F. Salger</i>	
Formal Verification of Secret Sharing Protocol Using Coq	381
<i>K. M. Yew, M. Z. Rahman, S. P. Lee</i>	
On Feasibility, Boundedness and Redundancy of Systems of Linear Constraints over R^2 -Plane	383
<i>N. D. Quang</i>	
Deduction in Logic of Association Rules	386
<i>J. Rauch</i>	
Asynchronous Migration in Parallel Genetic Programming	388
<i>S. Tongchim, P. Chongstitvatana</i>	
Verification Results for a Multimedia Protocol	390
<i>T. Tsang, R. Lai</i>	
Multipoint-to-Point ABR Service with Fair Intelligent Congestion Control in ATM Networks	393
<i>Q. Yu, D. B. Hoang</i>	
Author Index	397

Advances in Computing Science - ASIAN'99
5th Asian Computing Science Conference, Phuket,
Thailand, December 10-12, 1999 Proceedings
Thiagarajan, P.S.; Yap, R. (Eds.)
1999, XII, 408 p., Softcover
ISBN: 978-3-540-66856-5