

Table of Contents

Invited Lectures

Synthesizing State-Based Object Systems from LSC Specifications	1
<i>David Harel, Hillel Kugler</i>	
Applications of Finite-State Transducers in Natural Language Processing .	34
<i>Lauri Karttunen</i>	

Technical Contributions

Fast Implementations of Automata Computations	47
<i>Anne Bergeron, Sylvie Hamel</i>	
Regularly Extended Two-Way Nondeterministic Tree Automata	57
<i>Anne Brüggemann-Klein, Derick Wood</i>	
Glushkov Construction for Multiplicities	67
<i>Pascal Caron, Marianne Flouret</i>	
Implicit Structures to Implement NFA's from Regular Expressions	80
<i>Jean-Marc Champarnaud</i>	
New Finite Automaton Constructions Based on Canonical Derivatives . . .	94
<i>Jean-Marc Champarnaud, D. Ziadi</i>	
Experiments with Automata Compression	105
<i>Jan Daciuk</i>	
Computing Raster Images from Grid Picture Grammars	113
<i>Frank Drewes, Sigrid Ewert, Renate Klempien-Hinrichs, Hans-Jörg Kreowski</i>	
A Basis for Looping Extensions to Discriminating-Reverse Parsing	122
<i>Jacques Farré, José Fortes Gálvez</i>	
Automata for Pro- V Topologies	135
<i>Pierre-Cyrille Héam</i>	
Reachability and Safety in Queue Systems	145
<i>Oscar H. Ibarra</i>	
Generalizing the Discrete Timed Automaton	157
<i>Oscar H. Ibarra, Jianwen Su</i>	

Factorization of Ambiguous Finite-State Transducers	170
<i>André Kempe</i>	
MONA Implementation Secrets	182
<i>Nils Klarlund, Anders Møller, Michael I. Schwartzbach</i>	
Cursors	195
<i>Vincent Le Maout</i>	
An Automaton Model of User-Controlled Navigation on the Web	208
<i>K. Lodaya, R. Ramanujam</i>	
Direct Construction of Minimal Acyclic Subsequential Transducers	217
<i>Stoyan Mihov, Denis Maurel</i>	
Generic ϵ -Removal Algorithm for Weighted Automata	230
<i>Mehryar Mohri</i>	
An $O(n^2)$ Algorithm for Constructing Minimal Cover Automata for Finite Languages	243
<i>Andrei Păun, Nicolae Sântean, Sheng Yu</i>	
Unary Language Concatenation and Its State Complexity	252
<i>Giovanni Pighizzini</i>	
Implementation of a Strategy Improvement Algorithm for Finite-State Parity Games	263
<i>Dominik Schmitz, Jens Vöge</i>	
State Complexity and Jacobsthal's Function	272
<i>Jeffrey Shallit</i>	
A Package for the Implementation of Block Codes as Finite Automata	279
<i>Priti Shankar, K. Sasidharan, Vikas Aggarwal, B. Sundar Rajan</i>	
Regional Least-Cost Error Repair	293
<i>M. Vilares, V.M. Darriba, F.J. Ribadas</i>	
The Parameterized Complexity of Intersection and Composition Operations on Sets of Finite-State Automata	302
<i>H. Todd Wareham</i>	
Directly Constructing Minimal DFAs: Combining Two Algorithms by Brzozowski	311
<i>Bruce W. Watson</i>	
The MERLin Environment Applied to $\star$ -NFAs	318
<i>Lynette van Zijl, John-Paul Harper, Frank Olivier</i>	

Abstracts

Visual Exploration of Generation Algorithms for Finite Automata on the Web	327
<i>Stephan Diehl, Andreas Kerren, Torsten Weller</i>	
TREEBAG	329
<i>Frank Drewes, Renate Klempien-Hinrichs</i>	
Word Random Access Compression	331
<i>Jiří Dvorský, Václav Snášel</i>	
Extended Sequentialization of Transducers	333
<i>Tamás Gád</i>	
Lessons from INR in the Specification of Transductions	335
<i>J. Howard Johnson</i>	
Part-of-Speech Tagging with Two Sequential Transducers	337
<i>André Kempe</i>	
Solving Complex Problems Efficiently with Adaptive Automata	340
<i>João José Neto</i>	
Author Index	343