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# Language and Automata Theory and Applications

Second International Conference, LATA 2008  
Tarragona, Spain, March 13-19, 2008  
Revised Papers

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# Preface

These proceedings contain most of the papers that were presented at the Second International Conference on Language and Automata Theory and Applications (LATA 2008), held in Tarragona, Spain, during March 13–19, 2008.

The scope of LATA is rather broad, including: words, languages and automata; grammars (Chomsky hierarchy, contextual, multidimensional, unification, categorial, etc.); grammars and automata architectures; extended automata; combinatorics on words; language varieties and semigroups; algebraic language theory; computability; computational, descriptive, and parameterized complexity; decidability questions on words and languages; patterns and codes; symbolic dynamics; regulated rewriting; trees, tree languages and tree machines; term rewriting; graphs and graph transformation; power series; fuzzy and rough languages; cellular automata; DNA and other models of bio-inspired computing; quantum, chemical and optical computing; biomolecular nanotechnology; automata and logic; algorithms on automata and words; automata for system analysis and program verification; automata, concurrency and Petri nets; parsing; weighted machines; transducers; foundations of finite state technology; grammatical inference and algorithmic learning; text retrieval, pattern matching and pattern recognition; text algorithms; string and combinatorial issues in computational biology and bioinformatics; mathematical evolutionary genomics; language-based cryptography; data and image compression; circuits and networks; language-theoretic foundations of artificial intelligence and artificial life; digital libraries; and document engineering.

LATA 2008 received 134 submissions. Each of them was reviewed by at least three Program Committee members plus, in most cases, by additional external referees. After a thorough and vivid evaluation phase the committee decided to accept 40 papers (which means an acceptance rate of 29.85%). The conference programme also included three invited talks and two invited tutorials. Part of the success in the management of such a large number of submissions is due to the facilities provided by the EasyChair conference management system.

After the conference, the authors of the accepted and of the invited papers were asked to prepare revised versions of their papers (the former still satisfying the originally imposed 12-page limit). However, having post-proceedings offers the advantage of incorporating comments both of the reviewers and of the audience (received upon giving the talks). The present volume contains the 40 contributed papers plus extended abstracts of four of the invited papers.

June 2008

Carlos Martín-Vide  
Friedrich Otto  
Henning Fernau

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LATA 2008 was hosted by the Research Group on Mathematical Linguistics (GRLMC) at Rovira i Virgili University, Tarragona, Spain.

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