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Language and Automata Theory and Applications

4th International Conference, LATA 2010
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Proceedings

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Preface

These proceedings contain all the papers that were presented at the 4th International Conference on Language and Automata Theory and Applications (LATA 2010), held in Trier, Germany, during May 24–28, 2010.

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

LATA 2010 received 115 submissions, many among them of good quality. Each one was reviewed by at least three Program Committee members plus, in most cases, by additional external referees. After a thorough and vivid discussion phase, the committee decided to accept 47 papers (which means an acceptance rate of 40.86%). The conference program also included four invited talks. Part of the success in the management of such a large number of submissions is due to the excellent facilities provided by the EasyChair conference management system.

We would like to thank all invited speakers and authors for their contributions, the reviewers for their cooperation and Springer for the collaboration and publication.

February 2010

Adrian-Horia Dediu
Henning Fernau
Carlos Martín-Vide

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