Preface

These proceedings contain the papers that were presented at the 5th International Conference on Language and Automata Theory and Applications (LATA 2011), held in Tarragona, Spain, during May 26–31, 2011.

The scope of LATA is rather broad, including: algebraic language theory; algorithms for semi-structured data mining; 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; computational linguistics; data and image compression; decidability questions on words and languages; descriptional 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 semi-groups; language-based cryptography; language-theoretic foundations of artificial intelligence and artificial life; neural networks; parallel and regulated rewriting; parsing; pattern recognition; patterns and codes; power series; quantum, chemical and optical computing; semantics; string and combinatorial issues in computational biology and bioinformatics; string processing algorithms; symbolic dynamics; term rewriting; transducers; trees, tree languages and tree machines; and weighted machines.

LATA 2011 received 91 submissions. Each one was reviewed by four Program Committee members, many of whom consulted with external referees. After a thorough and lively discussion phase, the committee decided to accept 36 papers (which represents an acceptance rate of 39.56%). The conference program 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 excellent facilities provided by the EasyChair conference management system.

We would like to thank all invited speakers and authors for their contributions, the Program Committee and the reviewers for their cooperation, and Springer for its very professional publishing work.

March 2011

Adrian-Horia Dediu
Shunsuke Inenaga
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