Preface

This volume contains the papers accepted for presentation at the *5th Workshop on Algorithm Engineering* (WAE 2001) held in Århus, Denmark, on August 28–31, 2001. The Workshop on Algorithm Engineering is an annual meeting devoted to researchers and developers interested in practical aspects of algorithms and their implementation issues. The goal of the workshop is to present recent research results and to identify and explore directions of future research in the field of algorithm engineering. Previous meetings were held in Venice (1997), Saarbrücken (1998), London (1999), and Saarbrücken (2000).

Papers were solicited describing original research in all aspects of algorithm engineering including:

– Implementation, experimental testing, and fine-tuning of discrete algorithms.
– Development of software repositories and platforms which allow use of, and experimentation with, efficient discrete algorithms.
– Novel uses of discrete algorithms in other disciplines and the evaluation of algorithms for realistic environments.
– Methodological issues including standards in the context of empirical research on algorithms and data structures.
– Methodological issues regarding the process of converting user requirements into efficient algorithmic solutions and implementations.

The Program Committee selected 15 papers from a total of 25 submissions from 17 countries, according to selection criteria, taking into account paper originality, quality, and relevance to the workshop.

WAE 2001 was jointly organized with ESA 2001 (the *9th European Symposium on Algorithms*) and WABI 2001 (the *1st Workshop on Algorithm in BioInformatics*) in the context of ALGO 2001. ALGO 2001 had seven invited talks most of which were relevant to WAE 2001. The seven distinguished invited speakers of ALGO 2001 were:

Susanne Albers	University of Dortmund
Lars Arge	Duke University
Andrei Broder	AltaVista
Herbert Edelsbrunner	Duke University
Jotun Hein	University of Aarhus
Gene Myers	Celera Genomics
Uri Zwick	Tel Aviv University

We want to thank all the people who contributed to the success of the workshop: those who submitted papers for consideration; the program committee members and the referees for their timely and invaluable contribution; the invited speakers of ALGO 2001; the members of the organizing committee for their

June 2001   Gerth Stølting Brodal
                                                                Daniele Frigioni
                                                        Alberto Marchetti-Spaccamela

Program Committee

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Paolo Ferragina	University of Pisa
Klara Kedem	Ben-Gurion University
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Mark Overmars	Utrecht University
Stefan Schirra	Think & Solve, Saarbrücken
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Karen Kjær Møller	BRICS - University of Aarhus
Erik Meineche Schmidt (Chair)	BRICS - University of Aarhus

Additional Referees

Eitan Bachmat	Gabriele Di Stefano	Avraham Melkman
Amos Beimel	Ioannis Emiris	Linda Pagli
Serafino Cicerone	Antonio Frangioni	Marco Pellegrini
Valentina Ciriani	Daniele Frigioni	Andrea Pietracaprina
Fabrizio D'Amore	Roberto Grossi	Sylvain Pion
Frank Dehne	Matthew Katz	Nadia Pisanti
Camil Demetrescu	Jörg Keller	Eyal Shimony
Yefim Dinitz	Giovanni Manzini	