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Series Editors

Gerhard Goos, Karlsruhe University, Germany
Juris Hartmanis, Cornell University, NY, USA
Jan van Leeuwen, Utrecht University, The Netherlands

Volume Editors

Jeffrey S. Vitter
Duke University, Department of Computer Science
Box 90129, Durham, NC 27708-0129, USA
E-mail: jsv@cs.duke.edu

Christos D. Zaroliagis
University of London, King's College, Department of Computer Science
Strand, London WC2R 2LS, UK
E-mail: zaro@dcs.kcl.ac.uk

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Preface

This volume contains the papers accepted for presentation at the *3rd Workshop on Algorithm Engineering* (WAE'99) held in London, UK, on July 19–21, 1999, together with the extended or short abstracts of the invited lectures by Andrew Goldberg, Bill McColl, and Kurt Mehlhorn. WAE is an annual meeting devoted to researchers and developers interested in the practical aspects of algorithms and their implementation issues. Previous meetings were held in Venice (1997) and Saarbrücken (1998).

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
- Methodological issues such as standards in the context of empirical research on algorithms and data structures
- Methodological issues involved in the process of converting user requirements into efficient algorithmic solutions and implementations

The program committee selected 24 papers from a total of 46 submissions. The program committee meeting was conducted electronically from May 6 to May 16, 1999. The criteria for selection were perceived originality, quality, and relevance to the subject area of the workshop. Considerable effort was devoted to the evaluation of the submissions and to providing the authors with helpful feedback. Each submission was reviewed by at least three program committee members (occasionally assisted by subreferees). However, submissions were not refereed in the thorough way that is customary for journal papers, and some of them represent reports of continuing research. It is expected that most of the papers in this volume will appear in finished form in scientific journals. A special issue of the *ACM Journal on Experimental Algorithmics* will be devoted to selected papers from WAE'99.

We would like to thank all those who submitted papers for consideration, as well as the program committee members and their referees for their invaluable contribution. We gratefully acknowledge the dedicated work of the organizing committee (special thanks to Tomasz Radzik and Rajeev Raman, who did most of the work), the support of the Department of Computer Science at King's College, and the generous help of various volunteers: Gerth Brodal, Sandra Elborough, Ulrich Endriss, Viren Lall, José Pinzón, and Naila Rahman. We thank them all for their time and effort.

July 1999

Jeff Vitter
Christos Zaroliagis

Invited Lecturers

Andrew Goldberg	InterTrust STAR Lab, Sunnyvale, USA
Bill McColl	Oxford University and Sychron Ltd, UK
Kurt Mehlhorn	Max-Planck-Institut für Informatik, Saarbrücken, Germany

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Thomas Cormen	Dartmouth Colledge
Giuseppe Italiano	Università di Roma "Tor Vergata"
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Bernard Moret	University of New Mexico
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Rakesh Barve	Dimitrios Gunopulos	Cliff Stein
Julien Basch	Octavian Procopiuc	
Gerth Brodal	Tomasz Radzik	

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