Kamal Lodaya
Meena Mahajan (Eds.)

FSTTCS 2004: Foundations of Software Technology and Theoretical Computer Science

LNCS 3328

24th International Conference
Chennai, India, December 2004
Proceedings

Springer

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Chennai, India, December 16-18, 2004
Proceedings

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Volume Editors

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Library of Congress Control Number: 2004116533

CR Subject Classification (1998): F.3, D.3, F.4, F.2, F.1, G.2

ISSN 0302-9743
ISBN 3-540-24058-6 Springer Berlin Heidelberg New York

Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India
Printed on acid-free paper SPIN: 11365822 06/3142 5 4 3 2 1 0

Lecture Notes in Computer Science 3328

Commenced Publication in 1973
Founding and Former Series Editors:
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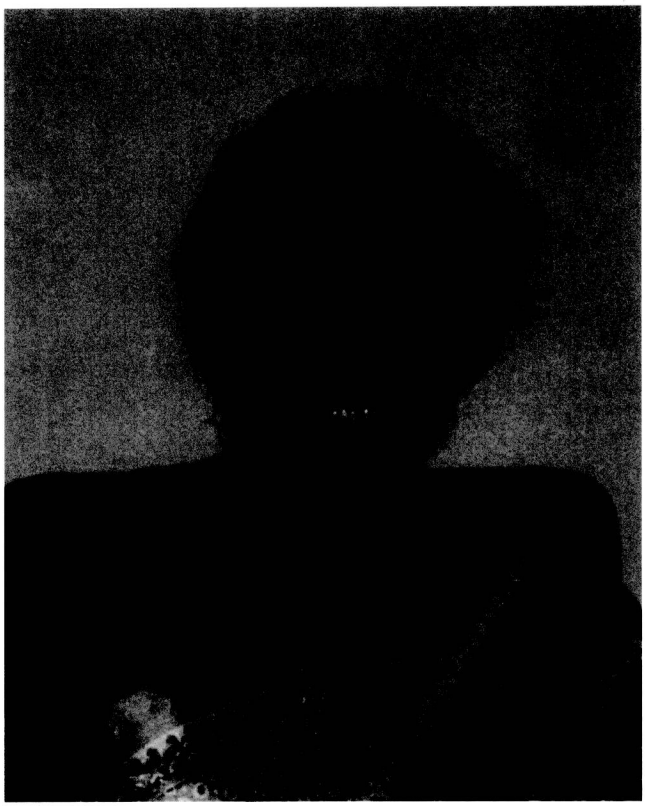

Rani Siromoney is one of the foremost theoretical computer scientists in India and a leading authority on Formal Languages and Automata Theory. Over a period spanning four decades, she has made tremendous technical contributions to the field through her research. She has also inspired generations of students in Chennai with her teaching and has been responsible for building up a community of dedicated teachers and researchers in this part of India to carry forward her vision.

Prof. Siromoney has served on the Editorial Board of the journals *Theoretical Computer Science* and *International Journal of Foundations of Computer Science* and has headed several international collaborative research projects. She also served on the Programme Committee for the first 10 editions of FSTTCS.

She is currently Professor Emeritus at Madras Christian College, the illustrious institution where she has spent most of her professional life. She continues to play an active role in research and teaching as an Adjunct Professor at the Chennai Mathematical Institute.

Preface

The international conference on the Foundations of Software Technology and Theoretical Computer Science (FSTTCS) is the longest-running conference on computer science in India, and is organized under the aegis of the Indian Association for Research in Computing Science, IARCS. Since its inception in 1981, the conference (held annually in the month of December) has helped in nurturing and creating an environment for the exchange of ideas amongst the research community in the country, by attracting top scientists around the world to the conference. This volume contains the proceedings of the 24th FSTTCS conference held in December 2004.

A strong point of the FSTTCS programmes has been excellent invited talks by eminent computer scientists of international renown. Continuing this tradition, this FSTTCS featured invited talks by Javier Esparza, Piotr Indyk, Pavel A. Pevzner, John C. Reynolds, and Denis Thérien. We thank our invited speakers for readily agreeing to come to FSTTCS, and for providing write-ups for the proceedings.

It is our pleasure that IARCS chose to honor Prof. Rani Siromoney at this conference, on the occasion of her 75th birthday. The influence she has wielded (and the impact she has exerted) in Indian theoretical computer science is tremendous, and the tribute is fitting and richly deserved. We thank R.K. Shyamasundar for chairing the special session in her honor, and Kamala Krithivasan and K.G. Subramanian for speaking at the session.

The 24th FSTTCS conference attracted 176 submissions with authors from 35 countries. We thank the authors for their interest in the conference.

The Programme Committee (PC) decided that 21 submissions were out of scope. The authors were immediately informed that they could submit their work elsewhere. The remaining papers went through a rigorous refereeing process; 526 referee reports were produced, some by the 24 PC members themselves. The bulk of the reports were from 328 other referees from 23 countries.

A conference stands or falls on its refereeing. On behalf of the PC, we express our immense appreciation for the time and effort spent by the referees in assessing submissions and writing (often meticulous) reports.

Referees do not always agree on the merits of a paper. During August it was the job of the PC to arrive at a consensus and select papers for the conference. We thank our PC colleagues for their quality time and effort.

And of course our thanks go to the 85 authors (hailing from 12 countries) of the 38 contributed submissions that form most of this volume. We also thank them for ensuring that at least one author came to the conference to present the paper.

We thank Springer for agreeing to publish these proceedings in their prestigious Lecture Notes in Computer Science series, and for their professional management of the publication.

Satellite workshops/tutorials have by now become a standard feature at the FSTTCS conferences. This year, the conference had two satellite workshops: a Workshop on Algorithms for Dynamic Data, organized by Pankaj Agarwal and S. Muthukrishnan, and a Workshop on Logics for Dynamic Data, organized by Uday Reddy. We thank the workshop coordinators for putting together these very interesting workshops, and the workshop speakers for agreeing to give talks at the workshops.

We thank the Institute of Mathematical Sciences for readily agreeing to provide partial financial support for the conference. We are a rather small institution, but the administration here worked very hard to ensure that the organization was smooth. Our colleagues in the theoretical computer science group, along with colleagues at the Chennai Mathematical Institute, put in a lot of effort in coordinating all the work. Our graduate students cheerfully volunteered for any jobs which needed to be done, and did them well. We thank them all.

FSTTCS uses its own conference software, developed initially by V Vinay and modified in successive years. This year Jaikumar Radhakrishnan programmed the web-based submission, and the IMSc system administrators, G. Subramoniam and Raveendra Reddy, handled the installation. We thank them for being always at hand for help, and taking care of one request after another.

The silver jubilee conference in December 2005 will be held, for the first time in FSTTCS's history, in the city of Kolkata. We look forward to seeing you there!

December 2004 Kamal Lodaya and Meena Mahajan

Organization

The 24th FSTTCS Conference and associated workshops were held at the Institute of Mathematical Sciences, Chennai, India during December 13–18, 2004.

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