In Memory of Timo Raita (1950-2002)

While preparing these proceedings, we received news of Timo Raita's tragic death, after a severe illness. He came to the Department of Computer Science, University of Turku, in 1980, received his PhD in 1988, and acted first as a lecturer, then as a professor of computer science. Timo was a member of the organizing committee of this workshop, which remained one of his last official duties.

Timo's research interests were particularly in data compression, string algorithms, and information retrieval. He published several papers, for example, on source encoding, text compression, index compression, and string matching. Timo was a driving force in algorithmic research at the University of Turku and highly appreciated by his colleagues and students. We shall all miss him.

Preface

The papers in this volume were presented at SWAT 2002, the Eighth Scandinavian Workshop on Algorithm Theory. The workshop, which is really a conference, has been held biennially since 1988, rotating between the five Nordic countries (Denmark, Finland, Iceland, Norway, and Sweden). It also has a loose association with the WADS (Workshop on Algorithms and Data Structures) conference that is held in odd numbered years. SWAT is intended as a forum for researchers in the area of design and analysis of algorithms. The SWAT conferences are coordinated by the SWAT steering committee, which consists of B. Aspvall (Bergen), S. Carlsson (Luleå), H. Hafsteinsson (Iceland), R. Karlsson (Lund), A. Lingas (Lund), E. M. Schmidt (Århus), and E. Ukkonen (Helsinki).

The call for papers sought contributions in all areas of algorithms and data structures, including computational geometry, parallel and distributed computing, graph theory, computational biology, and combinatorics. A total of 103 papers were submitted, out of which the program committee selected 43 for presentation. In addition, invited lectures were presented by Torben Hagerup (Frankfurt) and Heikki Mannila (Helsinki).

SWAT 2002 was held in Turku, July 3-5, 2002, and was locally organized by a committee consisting of T. Järvi (chair), L. Bergroth, T. Kaukoranta, T. Raita, J. Smed, and J. Teuhola (secr.), all from the Department of Computer Science, University of Turku.

We wish to thank all the referees who aided in evaluating the papers. We also thank the Academy of Finland, Turku Centre for Computer Science (TUCS), and Turku University Foundation for financial support.

July 2002

Martti Penttonen Erik Meineche Schmidt

Organization

SWAT 2002 was organized by the Department of Computer Science, University of Turku.

Program Committee

Martti Penttonen, University of Kuopio (co-chair) Erik Meineche Schmidt, University of Århus (co-chair) Micah Adler, University of Massachusetts Martin Dietzfelbinger, Technische Universität Ilmenau Pinar Heggernes, University of Bergen Giuseppe F. Italiano, University of Rome Haim Kaplan, Tel Aviv University Rolf Karlsson, University of Lund Jyrki Katajainen, University of Copenhagen Olli Nevalainen, University of Turku Jop Sibeyn, University of Umeå Michiel Smid, Carleton University

Referees

Isto Aho	Rolf Fagerberg	Christos Levcopoulos
Tero Aittokallio	Jiri Fiala	Moshe Lewenstein
Lyudmil Aleksandrov	Jarl Friis	Andrzej Lingas
Stephen Alstrup	Leszek Gąsieniec	Eva-Marta Lundell
Mattias Andersson	Jordan Gergov	Bengt Nilsson
Estie Arkin	Hector Gonzalez-Banos	Jyrki Nummenmaa
Lasse Bergroth	Henrik Grove	Jeppe Nejsum Madsen
Anne Berry	Joachim Gudmundsson	Fredrik Manne
Philip Bille	Inge Li Gørtz	Ulrich Meyer
Holger Blaar	Mikael Hammar	Peter Bro Miltersen
Jean Blair	Iiro Honkala	Michael Minock
Jorma Boberg	Heikki Hyyrö	Pat Morin
Jesper Bojesen	Christian Icking	Erkki Mäkinen
Gerth S. Brodal	Tibor Jordan	Rasmus Pagh
Wentong Cai	David Grove Jørgensen	Tomi Pasanen
Jianer Chen	Jarkko Kari	Christian N. S. Pedersen
Artur Czumaj	Michael Kaufmann	Morten Nicolaj Pedersen
Camil Demetrescu	Timo Knuutila	Mia Persson
Anders Dessmark	Petter Kristiansen	Ely Porat
Frank Drewes	Elmar Langetepe	Andrzej Proskurowski

Yuval Rabani Prabhakar Ragde Jagath Rajapakse Theis Rauhe Frederik Rønn Peter Sanders Petra Scheffler Roded Sharan Mikkel Sigurd Steve Skiena Søren Skov Christian Sloper Roberto Solis-Oba Hans-Henrik Stærfeldt Kokichi Sugihara Arie Tamir Jan Arne Telle Jukka Teuhola J. Urrutia Pawel Winter Lars Yde Martin Zachariasen