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Theoretical Aspects of Computing – ICTAC 2004

First International Colloquium
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Revised Selected Papers



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Preface

This volume contains the proceedings of ICTAC 2004, the 1st International Colloquium on Theoretical Aspects of Computing, which was held in Guiyang, China on 20–24 September 2004.

ICTAC was founded by the International Institute for Software Technology of the United Nations University (UNU-IIST). Its aim is to bring together practitioners and researchers from academia, industry, and government to present research results, and exchange experience, ideas, and solutions for their problems in theoretical aspects of computing. The geographic focus of the ICTAC events is on developing countries to help to strengthen them in their research, teaching, and development in computer science and engineering, to encourage research cooperation among developing countries, and to improve the links between developing countries and industrial countries.

The Program Committee of ICTAC 2004 received 111 submissions from over 30 countries and regions. Each paper was reviewed, mostly by at least three referees working in relevant fields, but by two in a few cases. Borderline papers were further discussed during an online meeting of the Program Committee. Thirty-four papers were accepted based on originality, technical soundness, presentation and relevance to software engineering and formal methods. We sincerely thank all the authors who submitted their work for consideration. We thank the Program Committee members and the other referees for their great effort and professional work in the reviewing and selecting process. Their names are listed on the following pages. In addition to the contributed papers, the proceedings also includes contributions from the invited speakers: José Luiz Fiadeiro, He Jifeng, Huimin Lin and Rustan Leino.

Six very good tutorials were selected as affiliated events of ICTAC 2004. We express our thanks to all those who submitted tutorial proposals. We have also included the abstracts of the tutorials in the proceedings.

We thank the Organizing Committee Chair, Danning Li, the Finance Chair, Dan Li, and the Publicity Chair, Bernhard Aichernig, for their great collaborative effort and hard work that made the event so successful and enjoyable. We are truly grateful to the Advisory Committee members for their advice and suggestions. We particularly thank Kitty Lok Sam Chan and Anna UnLai Chan of UNU-IIST for their hard work in maintaining the conference administration system. All the members of staff at UNU-IIST helped in many ways. In particular, the Acting Director, Chris George, actively supported the organization of ICTAC.

ICTAC 2004 was organized and sponsored by UNU-IIST and the Academy of Sciences of Guizhou Province, China.

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ICTAC 2004 was organized by the International Institute for Software Technology of the United Nations University (UNU-IIST) and Guizhou Academy of Sciences, China.

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The Program Committee members and the external referees listed below did an excellent job in reviewing an unexpectedly big number of submissions under the pressure of a very tight deadline.

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