Foreword from the Editors

This IEEE Computer Society Book of Proceedings is assembled following the 2008 International Conference on Computational Science and its Applications, ICCSA 2008, held in Perugia, Italy, from June 30th to July 3rd, 2008. It represents a comprehensive collection of over 80 refereed workshop papers selected from numerous submissions to ICCSA 2008.

The continuous support of Computational Science researchers has helped ICCSA to become a firmly established forum in the area of Scientific Computing. This year, the collection of fully refereed high-quality original works accepted for presentation at ICCSA 2008 is published for the second year by IEEE CS. This volume complements the collection of general track papers accepted for presentation at ICCSA 2008 and published in LNCS proceedings, Springer-Verlag.

Over the past ten years, since the first conference on Computational Science took place, this vibrant and promising area has firmly established itself as a vital part of many scientific investigations in a broad gamut of disciplines. Having deep roots in fundamental disciplines, such as mathematics, physics, and chemistry, the Computational Science field is finding new applications in such broad and diverse areas as aerospace and automotive industries, bioinformatics and nanotechnology studies, networks and grid computing, computational geometry and biometrics, computer education and art. Due to the growing complexity and sophistication of many challenges in computational science, the use of sophisticated algorithms and emerging technologies is inevitable. Together, these far reaching scientific areas contribute to shape this Conference in the realms of state-of-the-art computational science research and applications, encompassing the facilitating theoretical foundations and the innovative applications of such results in other areas.

The topics of refereed papers presented in this volume span traditional as well as emerging Computational Science realms, and are structured according to the major conference workshops:

- Information Systems and Information Technologies
- Data Storage Devices and Systems
- Future Security Services
- UnConventional High Performance Computing
- Computer Algebra Systems and their Applications
- Computer Graphics
- Computational Geometry and Applications
- Computational Forensics

We recognize the contribution of the International Steering Committee and the International Program Committee for their tremendous support in putting this Conference together, five hundred referees for their diligent work in reviewing the submissions, and all the sponsors, supporting organizations and volunteers of ICCSA for contributing their time, energy and resources to this event.

Finally, we thank all authors for their submissions making the ICCSA Conference year after year one of the premium events on the scientific community scene, facilitating exchange of ideas, fostering new collaborations, and shaping the future of the Computational Science.

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