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Algorithms and Architectures for Parallel Processing

11th International Conference, ICA3PP 2011
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Proceedings, Part I

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Message from the ICA3PP 2011 Program Chairs

A warm welcome to the 11th International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP 2011) and to Melbourne, Australia.

ICA3PP 2011 is the 11th in this series of conferences that started in 1995 and is devoted to algorithms and architectures for parallel processing. ICA3PP is now recognized as the main regular event focusing on the many dimensions of parallel algorithms and architectures, encompassing fundamental theoretical approaches, practical experimental results, and commercial components and systems. As applications of computing systems have permeated every aspects of daily life, the power of computing systems has become increasingly critical. On top of these motivations, ICA3PP 2011 provides a widely-known forum for researchers and practitioners from countries around the world to exchange ideas for improving the computation power of computing systems.

In response to the ICA3PP 2011 call for papers, we received 85 submissions from 33 different countries. These papers were evaluated on the basis of their originality, significance, correctness, relevance, and technical quality. Each paper was reviewed by at least three members of the Program Committee. Based on these evaluations, 24 regular papers and 17 short papers were selected for presentation at the conference, representing an acceptance rate of 28.2% for regular papers and 20% for short papers.

We would like to thank the Program Committee members and additional reviewers from all around the world for their efforts in reviewing the large number of papers. We are grateful to all the associated Conference/Workshop Chairs for their dedication and professionalism. We would like to extend our sincere thanks to the ICA3PP Steering Committee Chairs, Prof. Wanlei Zhou and Prof. Yi Pan, and to the General Chairs, Prof. Andrzej Goscinski and Prof. Peter Brezany. They provided us with invaluable guidance throughout the process of paper selection and program organization. We thank Georgi Cahill, the Conference Secretary, for her professional organization. We also thank Yu Wang and Sheng Wen for their help on completing the final proceedings.

Last but not least, we would also like to take this opportunity to thank all the authors for their submissions to ICA3PP 2011 and the associated symposium/workshops. Many of you have travelled some distance to participate in the conference.

Welcome to Melbourne and enjoy!

October 2011

Yang Xiang
Alfredo Cuzzocrea
Michael Hobbs

Message from the ICA3PP 2011 General Chairs

Welcome to the beautiful and ‘World’s Most Livable City’ – Melbourne. We are privileged and delighted to welcome you to the 11th International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP 2011).

Following the traditions of the previous successful ICA3PP conferences held in Hangzhou, Brisbane, Singapore, Melbourne, Hong Kong, Beijing, Cyprus, Taipei and Busan, this year ICA3PP 2011 is held in Melbourne, Australia. The objective of ICA3PP 2011 is to bring together researchers and practitioners from academia, industry and government to advance the theories and technologies in parallel and distributed computing. ICA3PP 2011 focuses on two broad areas of parallel and distributed computing, i.e., architectures, algorithms and networks, and systems and applications. The conference of ICA3PP 2011 is organized by Deakin University, Australia.

In addition to the ICA3PP 2011 main conference, one symposium and three workshops are being held together with ICA3PP 2011. They are:

1. 2011 International Symposium on Advances of Distributed Computing and Networking (ADCN 2011)
2. The 4th IEEE International Workshop on Internet and Distributed Computing Systems (IDCS 2011)
3. The 1st IEEE International Workshop on Parallel Architectures for Bioinformatics Systems (HardBio 2011)
4. The 3rd International Workshop on Multicore and Multithreaded Architectures and Algorithms (M2A2 2011)

We sincerely thank the many people who have helped in organizing ICA3PP 2011 and the associated symposium/workshops. We would like to thank the Program Chairs, Yang Xiang, Alfredo Cuzzocrea and Michael Hobbs, for their leadership in providing the excellent technical program.

We wish you a very enjoyable and rewarding experience at ICA3PP 2011 in Melbourne!

October 2011

Andrzej Goscinski
Peter Brezany

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