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Preface

On behalf of the program and organizing committee members of this conference, we are pleased to present you with the proceedings of the 12th Asia-Pacific Computer Systems Architecture Conference (ACSAC 2007), which was hosted in Seoul, Korea on August 23-25, 2007. This conference has traditionally been a forum for leading researchers in the Asian, American and Oceanian regions to share recent progress and the latest results in both architectural and system issues. In the past few years the conference has become more international in the sense that the geographic origin of participants has become broader to include researchers from all around the world, including Europe and the Middle East.

This year, we received 92 paper submissions. Each submission was reviewed by at least three primary reviewers along with up to three secondary reviewers. The total number of completed reviews reached 333, giving each submission 3.6 reviews on average. All the reviews were carefully examined during the paper selection process, and finally 26 papers were accepted, resulting in an acceptance rate of about 28%. The selected papers encompass a wide range of topics, with much emphasis on hardware and software techniques for state-of-the-art multicore and multithreaded architectures. In addition to the regular papers, the technical program of the conference included eight invited papers from world-class renowned researchers and featured two keynotes by Pen-Chung Yew (University of Minnesota) and Kunio Uchiyama (Hitachi), addressing *a compiler framework for speculative multithreading* and *power-efficient heterogeneous multicore chip development,* respectively. We sincerely hope that the proceedings will serve as a valuable reference for researchers and developers alike.

Putting together ACSAC 2007 was a team effort. First of all, we would like to express our special gratitude to the authors and speakers for providing the contents of the program. We would also like to thank the program committee members and external reviewers for diligently reviewing the papers and providing suggestions for their improvements. We believe that you will find the outcome of their efforts in this book. In addition, we extend our thanks to the organizing committee members and student volunteers, who contributed enormously to various aspects of conference administration. Finally, we would like to express special thanks to Chris Jesshope and Jinling Xue for sharing their experience and offering fruitful feedback in the early stages of preparing the conference.

June 2007

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