Thambipillai Srikanthan
Jingling Xue
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Advances in Computer Systems Architecture

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Preface

On behalf of the Program Committee, we are pleased to present the proceedings of the 2005 Asia-Pacific Computer Systems Architecture Conference (ACSAC 2005) held in the beautiful and dynamic country of Singapore. This conference was the tenth in its series, one of the leading forums for sharing the emerging research findings in this field.

In consultation with the ACSAC Steering Committee, we selected a 33-member Program Committee. This Program Committee represented a broad spectrum of research expertise to ensure a good balance of research areas, institutions and experience while maintaining the high quality of this conference series. This year's committee was of the same size as last year but had 19 new faces.

We received a total of 173 submissions which is 14% more than last year. Each paper was assigned to at least three and in some cases four Program Committee members for review. Wherever necessary, the committee members called upon the expertise of their colleagues to ensure the highest possible quality in the reviewing process. As a result, we received 415 reviews from the Program Committee members and their 105 co-reviewers whose names are acknowledged in the proceedings. The conference committee adopted a systematic blind review process to provide a fair assessment of all submissions. In the end, we accepted 65 papers on a broad range of topics giving an acceptance rate of 37.5%. We are grateful to all the Program Committee members and the co-reviewers for their efforts in completing the reviews within a tight schedule.

In addition to the contributed papers, this year's program included two keynote speeches from authorities in academia and industry: Ruby B. Lee of Princeton University on *Processor Architecture for Trustworthy Computers*, and Jesse Z. Fang of Intel Corporation on *Challenges and Opportunities on Multi-core Microprocessor*.

It was a rewarding experience to be the Program Chairs for this year's conference. We wish to take this opportunity to thank many people who contributed to making ACSAC 2005 a great success. Firstly, we thank the authors for submitting their work to this year's conference. We thank our efficient and energetic Organizing Committee. In particular, we would like to thank the Publicity Chairs, Vinod Prasad and Tulika Mitra, for having done a wonderful job in publicizing this conference and attracting a high number of submissions, the Web Chairs, Jiajia Chen and Xiaoyong Chen, for maintaining the online conference Web pages, and the Local Arrangements Chair, Douglas Maskell, for ensuring the smooth running of the conference in Singapore. We thank all the Program Committee members, who contributed considerable amounts of their valuable time. It was a great pleasure working with these esteemed members of our research community. We also thank all our sponsors for their support of this event.

Last, but not least, we would like to thank the General Chair, Graham Leedham, for his commitment and perseverance in this invaluable role.

We sincerely hope you will find these proceedings valuable and look forward to your participation in future ACSAC conferences.

August 2005

Thambipillai Srikanthan
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