

Pen-Chung Yew  
Jingling Xue (Eds.)

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# Advances in Computer Systems Architecture

9th Asia-Pacific Conference, ACSAC 2004  
Beijing, China, September 2004  
Proceedings



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## Preface

On behalf of the program committee, we were pleased to present this year's program for *ACSAC: Asia-Pacific Computer Systems Architecture Conference*.

Now in its ninth year, ACSAC continues to provide an excellent forum for researchers, educators and practitioners to come to the Asia-Pacific region to exchange ideas on the latest developments in computer systems architecture. This year, the paper submission and review processes were semiautomated using the free version of CyberChair. We received 152 submissions, the largest number ever. Each paper was assigned at least three, mostly four, and in a few cases even five committee members for review. All of the papers were reviewed in a two-month period, during which the program chairs regularly monitored the progress of the review process. When reviewers claimed inadequate expertise, additional reviewers were solicited. In the end, we received a total of 594 reviews (3.9 per paper) from committee members as well as 248 coreviewers whose names are acknowledged in the proceedings. We would like to thank all of them for their time and effort in providing us with such timely and high-quality reviews, some of them on extremely short notice.

After all of the reviews were received, there was a one-week electronic program committee meeting during May 14 and May 21. All of the papers were reviewed and discussed by the program committee, and the final set of papers were selected. Program committee members were allowed to submit papers, but their papers were handled separately. Each of their papers was assigned to at least four committee members and reviewed under the same rigorous review process. The program committee accepted 7 out of 11 "PC" submissions. In the end, the program committee selected a total of 45 papers for this year's program with an acceptance rate close to 30%. Unfortunately, many fine papers could not be accommodated in this year's program because of our schedule.

In addition to the contributed papers, this year's program included invited presentations. We were very pleased that three distinguished experts accepted our invitation to share their views on various aspects of computer systems architecture design: James E. Smith (University of Wisconsin-Madison, USA) on *Some Real Observations on Virtual Machines*, Jesse Z. Fang (Intel, USA) on *A Generation Ahead of Microprocessor: Where Software Can Drive uArchitecture to?*, and, finally, Guojie Li (Chinese Academy of Sciences, China) on *Make Computers Cheaper and Simpler*.

On behalf of the program committee, we thank all of the authors for their submissions, and the authors of the accepted papers for their cooperation in getting their final versions ready in time for the conference. We would also like to thank the Web Chair, Lian Li, for installing and maintaining CyberChair, and the Local Arrangements Chair, Wenguang Chen, for publicizing this conference.

Finally, we want to acknowledge the outstanding work of this year's program committee. We would like to thank them for their dedication and effort

in providing timely and thorough reviews for the largest number of submissions ever in our conference history, and their contribution during the paper selection process. It was a great pleasure working with these esteemed members of our community. Without their extraordinary effort and commitment, it would have been impossible to put such an excellent program together in a timely fashion. We also want to thank all our sponsors for their support of this event. Last, but not least, we would like to thank the General Chair, Weimin Zheng for his advice and support to the program committee and his administrative support for all of the local arrangements.

June 2004

Pen-Chung Yew  
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