

Message from the General Chairs and Program Chairs

Welcome to the First International Conference on Autonomic Computing 2004 (ICAC 2004) and to New York City, New York.

ICAC 2004 is the first in what we hope will be a premier series of conferences addressing both theoretical and practical issues in the field of Autonomic Computing. It is a merger of two very successful workshops held during the summer of 2003: Algorithms and Architectures for Self-Managing Systems, which was held at the Federated Computing Research Conference in San Diego, CA on June 11, 2003, and the Active Middleware Services workshop on Autonomic Computing at the High Performance Distributing Conference in Seattle, WA on June 25, 2003. With over 65 participants at each workshop, it was clearly time to establish a full-fledged, comprehensive conference to fulfill the needs of this rapidly growing research community.

As we stated in the Call for Papers, “The purpose of the International Conference on Autonomic Computing is to bring together researchers in diverse fields who are addressing important aspects of self-management in computing systems. In so doing, we hope to establish a unified community that can work together to realize the ultimate vision of large-scale self-managing systems.” Our call was answered resoundingly. We received nearly 150 paper and poster submissions from universities and industry labs all over the world, representing a broad array of topics pertaining to autonomic computing.

With remarkable dedication, program committee members and their colleagues carefully reviewed this unanticipated large volume of papers and posters, finally resulting in the outstanding selection of 31 full papers and 41 posters that appear in these proceedings. Papers covering self-managing components, architectures, toolkits, and system-level technologies are complemented by those addressing autonomic computing topics from the perspectives of artificial intelligence, human interaction with autonomic systems, and fundamental issues in the science of autonomic computing. Having thus already achieved our goal of bringing together researchers in diverse fields, we hope that, by facilitating synergistic interactions and discussions among those researchers in the context of autonomic computing, the conference will realize the second and even more important goal of establishing a sort of unity from that diversity.

This event and program would not have been possible without the tremendous efforts of the steering and program committees. We are grateful to the program committee for their outstanding efforts in assembling such an excellent program, and to the approximately 300 authors and co-authors who submitted the high quality material from which that program was selected. We also gratefully acknowledge the IEEE Computer Society for sponsoring the conference, as well as significant support from the National Science Foundation, IBM Corporation and Sun Microsystems.

With a mixture of gratitude and great sadness, we would like to acknowledge the many contributions Paul Baltes of the University of Arizona made to this conference right until his untimely death in December. Taking upon himself and his staff the full burden of logistics, social arrangements, and all matters pertaining to conference proceedings, Paul’s contributions were critical to the success of last year’s AMS workshop, and to its growth into this year’s conference. His presence and his contributions will be missed very much at ICAC 2004. Special thanks are due to Kelly Sutton from the University of Arizona, who assumed the mantle from Paul under these trying circumstances, and dealt expertly and seamlessly with the myriad complex logistics.

Once again, we welcome you to New York, and we hope you find ICAC 2004 to be an interesting and rewarding event.

Jeff Kephart, IBM Corporation

Manish Parashar, Rutgers University

General Co-Chairs

Vaidy Sunderam, Emory University

Rajarshi Das, IBM Corporation

Program Co-Chairs