Message from the Symposium Chairs

Welcome to Montreal and to the Third IEEE Real-Time Technology and Applications (RTAS) Symposium! This symposium seeks to foster discussion and evaluation of the emerging principles and practices underlying real-time system development. This year, the main events of the symposium include a workshop on:

- Real-Time Systems Education

Tutorials and panels on:

- Object-Oriented Design Techniques for Real Time Systems
- Real-Time CORBA
- Integrated Services on the Internet

and technical paper sessions covering such topics as:

- Performance Engineering
- Object-Oriented Modeling
- ATM Support for Real-Time Applications
- Systems Support for Multimedia Computing
- System Development and Analysis Tools
- Operating Systems and Distributed Systems
- Formal Methods and Processor Scheduling
- Case Studies and Applications
- Database and Concurrency Control
- Software Engineering
- Fault Tolerance

We received a total of 67 paper submissions and 5 tutorial proposals to this year’s symposium from 17 different countries. These submissions focused on topics ranging from traditional scheduling theory and real-time operating systems to hardware and quality-of-service support for real-time systems. Application domains in which real-time technologies were applied included factory automation, body-electronics, real-time search engines, hazard detection, telecommunications, on-demand video services, flight control, aperture radar, local and wide area networks, interactive audio processing, instrumentation systems and computer vision. This diversity of applications continues to show that real-time system technologies play a key role in today's high-tech world.

Each paper was read by at least 4 reviewers, and these reviews were discussed at a day-long meeting of the Program Committee. The competition for acceptance was unfortunately rather intense, and as a result, many high-quality papers could not be accepted for publication in the symposium proceedings due to space and time constraints. Consistent with the tradition and goals of RTAS, special consideration was given to those submissions that emphasized prototypes and implementations of real-time systems, applications and development tools.
In the end, 18 excellent full-length papers, 5 work-in-progress papers and 3 tutorials on timely topics of high interest to the real-time community were accepted for presentation at the symposium. As you will see, these papers continue the RTAS tradition of outstanding quality and practicality.

Continuing the tradition begun last year, a competition was held for the Best Student Paper Award. Many student-authored papers scored extremely high in the overall review process and declaring a single winner was quite difficult. However, after extensive deliberations, Dong-in Kang from the University of Maryland was declared the winner of the Best Student Paper award for his paper titled "Performance-Based Design of Distributed Real-Time Systems" and jointly authored with his advisors, Richard Gerber and Manas Saksena. On behalf of the Program Committee, we congratulate Mr. Kang for his excellent paper.

Finally, this symposium is the result of the hard work of many volunteers. We are particularly indebted to Daniel Mosse, Gerhard Fowler, and Tei-Wei Kuo, for their work publicizing RTAS, to Linda Buss for handling conference registration, and to Doug Locke for helping us deal with the numerous brush fires that flared up along the way. Thanks to all! Special thanks also go to Dr. Andre von Tilborg and the Office of Naval Research who helped sponsor this meeting. Without their generous financial support this Symposium would not have been possible.

Kevin Jeffay,  
*General Chair*  

Raj Rajkumar,  
*Program Chair*