Message from the Program Chair


Real-time systems have a strong multi-disciplinary nature that integrates mechanical engineering, electronics and information and communication technology (ICT). Applications make more and more progressive demands on the real-time embedded software components within their structure. These higher demands on product quality, the increasing number of product variants and the new demands on data communication between embedded components result in more and more complex applications. The fast changing technology causes a rapid evolution of the hardware itself, which becomes more and more complex. Furthermore, real-time systems are more and more equipped with sensors, bus systems and tele-maintenance systems that have themselves complex software parts. As the applications become more complex, they become also more expensive. A failing real-time system, either due to software errors or due to hardware failures will become more and more costly to repair.

The 12th Euromicro Conference on Real-Time Systems focuses on these complex problems and offers a forum to present state-of-the-art research and development in real-time computing. It presents 10 regular sessions, one work-in-progress session, one industry session and two invited speaker sessions. The call for papers resulted in 70 paper submissions, which were studied by 85 referees, producing 254 reviews. I am very grateful for all the timely work done by the referees. Without their reviewing work, this conference would not exist. Finally 30 papers were selected on the paper selection meeting in Delft. The program committee members that attended this meeting were Rachel Cardell-Oliver, Tullio Vardanega, Gerhard Fohler, Eduardo Tovar, Anders Törne, Peter Altenbernd and Horst Wedde. Given the 254 referee reports created by 85 active reviewers, this paper selection committee had the difficult task to select the 30 best papers. After lengthy discussions and many additional reviews we finally came to a very high-standing, well-balanced program. I thank the committee for their strong support and hard work during this process. The accepted papers were grouped into 10 regular sessions, covering scheduling theory, real-time databases, timing analysis, real-time object-oriented design, scheduling and control, modeling and analysis of real-time systems, clock synchronization and real-time systems development.

The conference further presents a keynote session addressing complex real-time issues within the Swedish automotive systems industry. I thank Ove Josefsson of Volvo Cars for being with us. A strong link to industry is crucial for our field of interest! Without it no real progress could be made. As such I am very pleased to present a new concept added to our conference for the first time in its history: a session related to industry problems. I thank Iain Bate for all his good work for organizing this session.

The program presents an invited talk on object oriented real-time system design coupled with a dedicated session to this important topic. I am very proud to have Prof. Maarten Boasson sharing with us his deep knowledge in this field.

In addition to the regular program the conference offers a work-in-progress session, introducing new approaches and opening up the discussion of current problems within the industrial application of real-time systems. I thank Peter Puschner for all his work in organizing this special session.
My task as PC-chair was greatly facilitated by the START electronic conference handling system, which was generously made available to us by Richard Gerber. The conference internet site at ecrts00.twi.tudelft.nl was smoothly integrated with the START system by our local PHD student Ruud de Rooij and MSc student Teun Vink. Thanks to both for their excellent jobs. I owe special thanks to Chiquita Snippe-Marlisa at the Euromicro office for her great managerial support, and publicity chair Marty Humprey for his support in getting the news of the conference to all interested parties in real-time issues all over the world.

Anders Törne and Martin Törngren did a splendid job in organizing this conference at such a beautiful place as Stockholm. We greatly acknowledge the contribution of KTH and all the other sponsors for helping to make this conference a financial success. Thanks also to all people at IEEE for keeping their confidence in our conference, their support in creating the proceedings and for being such a very competent and reliable partner in publishing the conference proceedings. My special thanks are for Thomas Baldwin, Deborah Plummer and Anne Rawlinson.

Finally I would like to thank all participants to the 12th Euromicro Conference on Real-Time Systems for partaking in this event and I hope that this program together with the splendid social events offered by the local organizers made their stay worthwhile! I wish you all a very exiting meeting in Stockholm.

Hans Toetenel
Real-Time Research group, Section Software Engineering
Technical University of Delft, The Netherlands