

# Message from the Chairs

On behalf of the CODES+ISSS 2007 Organizing and Program Committees, we would like to welcome you to the 5<sup>th</sup> IEEE/ACM International Conference on Hardware/Software Co-Design and System Synthesis.

CODES+ISSS is the premier conference for system-level design, with a focus on the design of embedded systems hardware, software, and tools. This year we continue the tradition of maintaining a high-quality forum for active discussion on current and innovative topics on embedded systems that bring together the latest in academic and industrial research and development. We selected the best of submitted papers through a rigorous review process, and have assembled an exciting program with a mix of keynotes, tutorials, special sessions, panels, and regular papers.

This year we received 127 full paper submissions and selected 40 papers for publication, with an acceptance rate of 31%. The Program Committee carefully reviewed all papers, with an average of over 5 reviews per paper. The Committee then met face to face for detailed discussions on the papers. Final paper selections were based on overall quality and novelty; papers with the highest quality and novelty were compared across different topic areas to yield the absolute best set of papers overall. We trust you will find this year's program to be exciting and stimulating, representing important advances in theory and practice of system-level design and related areas.

We also continue the tradition of complementing the CODES+ISSS program with tutorials and workshops. This year's tutorials cover timely and emerging topics such as "Programming the PLAYSTATION3 Cell Architecture" and "Compiling Code Accelerators for FPGAs", and are free to all registered attendees. CODES+ISSS 2007 hosts two full-fledged workshops: ESTIMedia, with a special emphasis on multimedia-related topics; and WASP, with a focus on application-specific processors.

CODES+ISSS is part of the growing Embedded Systems Week (ESWEEK) event that is becoming the premier international event in embedded systems research and development. CODES+ISSS is complemented by two other flagship sister conferences: EMSOFT (focused on embedded software), and CASES (focused on architecture and compilers). Registrants to ESWEEK are affiliated with a primary conference, but may attend sessions in any of the three conferences. Moreover, the technical programs of the three conferences, including keynotes, special sessions, panels, tutorials and workshops, have been carefully planned to avoid major overlaps and complement each other. ESWEEK blazes the embedded systems trail and is uniquely positioned to offer the best technical content for attendees in the areas of embedded systems design, tools, software, architecture and compilers.

The high technical quality of the CODES+ISSS program is a direct result of the dedicated efforts of the Steering Committee, Organizing Committee, Technical Program Committee and numerous reviewers who contributed their time and expertise, as well as the authors who submitted their work to the conference. We are grateful for their efforts and thank them whole heartedly. We would also like to thank our sponsoring societies: ACM SIGBED, SIGDA, SIGMICRO, and IEEE Circuits and Systems Society (CAS), Computer Society (CS) and the Council of Electronic Design Automation (CEDA). We also thank our industrial sponsors for their generous contributions. The continuing level of support and the involvement of industry highlight another key feature of CODES+ISSS: bridging both academic and industrial interests. Finally, we thank all the attendees who will bring the conference to life through their active participation for lively and interesting technical exchanges.

This year the conference takes place in the historic city of Salzburg, Austria. Salzburg has one of the best preserved city centers in the German-speaking world, and was declared a UNESCO World Heritage Site in 1997. Salzburg is famous as the birthplace of Mozart, the Salzburg Festival, the film "The Sound of Music" and many other gems. We hope you enjoy the conference and the location and we look forward to your participation in CODES+ISSS 2008!

**Soonhoi Ha and Kiyoung Choi**  
*General Co-Chairs*

**Nikil Dutt and Jürgen Teich**  
*Technical Program Co-Chairs*