Welcome to the proceedings of the 2005 International Conference on Embedded Software and Systems (ICESS-05) which was held in Xian, China, December 16-18, 2005.

With the advent of VLSI system level integration and system-on-chip, the center of gravity of the computer industry is now moving from personal computing into embedded computing. Embedded software and systems are increasingly becoming a key technological component of all kinds of complex technical systems, ranging from vehicles, telephones, aircraft, toys, security systems, to medical diagnostics, weapons, pacemakers, climate control systems, etc.

The ICESS-05 conference provided a premier international forum for researchers, developers, providers from academia and industry to address all resulting profound challenges; to present and discuss their new ideas, research results, applications and experience; to improve international communication and cooperation; to promote embedded software and system industrialization and wide applications on all aspects of embedded software and systems.

Besides the main conference, we also featured the following 4 workshops to extend the spectrum of the main conference:

- Scheduling Techniques for Real-Time Systems
- IXA/IXP Application in Embedded Systems
- The Modeling and Security of Ubiquitous Systems
- Intelligent Storage System and Technology

There was a very large number of paper submissions (361) for ICESS-05 main conference, not only from Asia and the Pacific, but also from Europe, and North and South America. All submissions were reviewed by at least three program or technical committee members or external reviewers. It was extremely difficult to select for the conference because there were so many excellent and interesting submissions. In order to allocate as many papers as possible and keep the high quality of the conference, besides 63 selected papers from the main conference and 8 selected papers from 4 workshops for the LNCS proceedings, we finally decided to accept 68 papers from the main conference and 20 selected papers from 4 workshops into the IEEE proceedings. We believe that all of these papers and topics not only provided novel ideas, new results, work in progress and state-of-the-art techniques in this field, but also promoted cutting-edge research and future cooperation, stimulated the future research activities in the area of embedded software and systems.

The exciting conference program was the result of the hard and excellent work of program vice chairs, external reviewers, program and technical committee members under a very tight schedule. We were also grateful to the members of the local organizing committee for supporting us in handling so many organizational tasks. Last but not least, we hoped you have enjoyed the conference’s technical and social program, the natural and historic attractions of the ancient Xian city.

Laurence T. Yang, Xingshe Zhou
Wei Zhao, Zhaohui Wu
Yian Zhu, Man Lin

Program, General and Workshop Chairs