

Conference Reports

Embedded Systems Week

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■ **EMBEDDED SYSTEMS WEEK** 2006 (<http://www.esweek.org>) took place from 22 to 27 October in Seoul, with almost 500 people attending from throughout the world. This exciting event combines conferences, tutorials, and workshops on various aspects of embedded-systems research and development, making it very attractive to researchers from both academia and industry. ESWEEK 2006 included three parallel conferences:

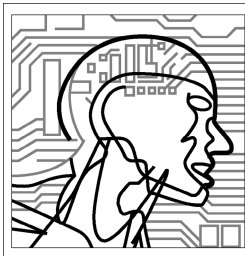
- CODES+ISSS, the International Conference on Hardware/Software Codesign and System Synthesis (<http://www.codes-iss.org>);
- EMSOFT, the International Conference on Embedded Software (<http://www.emsoft.org>); and
- CASES, the International Conference on Compilers, Architecture, and Synthesis for Embedded Systems (<http://www.casesconference.org>).

These three conferences included three keynote speeches, two panels, three special sessions, four tutorials, and 125 paper presentations. The three keynotes were “Promises and Challenges of Mobile Embedded System: An Industry Perspective,” by Nam-Sung Woo, vice president of Samsung Electronics; “Embedded System Development for Automotive Applications: Trends and Challenges,” by Werner Damm, OFFIS (Oldenburg Research and Development Institute for Information Technology Tools and Systems), Germany; and “Dances with Multimedia: Embedded Video Codec Design,” by Liang-Gee Chen, Dept. of Electrical Engineering, National Taiwan University. The four free tutorials were “UML and Model-Driven Development for SoC design,” “Automotive Electronics: System, Software, and Local Area

Network,” “Automated Architectural Synthesis from C algorithms,” and “Component-Based Embedded Software Design.” ESWEEK also included seven workshops in related areas, so that attendees could delve into specific topics in more detail: “Estimedia: Embedded Systems for Real-Time Multimedia,” “CA-SA: Compiler Assisted SoC Assembly,” “Foundations and Applications of Component-Based Design,” “Embedded Systems Education,” “Embedded Systems Security,” “Hands-on UML,” and “Software Support for Portable Storage.”

ESWEEK is the result of a gradual but concerted effort to bring together conferences and communities involved in embedded-systems research. In 2003, two well-established conferences, CODES and ISSS, merged to form CODES+ISSS. In just two years, CODES+ISSS quickly established itself as the main event for research and development of systems hardware, software, and tools. In 2005, CODES+ISSS and another well-established conference, EMSOFT, were colocated, and the ESWEEK event was born. The success of ESWEEK 2005 propelled the organizers to join forces with a third conference, CASES, thereby bringing in the one main area that had remained under-represented at ESWEEK: compilers and architectures for embedded systems.

ESWEEK is truly a global event, as evidenced by this year’s excellent attendance in Seoul and the strong corporate support that ESWEEK receives in grants from about 25 companies worldwide. ESWEEK also enjoys the sponsorship of several professional societies from ACM (SIGBED, SIGDA, and SIGMICRO) and the IEEE (the IEEE Computer Society, the IEEE Circuits and Systems Society, and the IEEE Council for Electronics



A MESSAGE FROM THE INCOMING CHAIR

In this first DATC Newsletter of 2007, I'd like to review some of the changes that occurred in 2006. First, unforeseen circumstances led me to the DATC chair earlier than expected. As I began serving in this position, I once again realized the importance of DATC and the responsibility we have to provide real value differentiated from what other existing institutions provide. Second, Joe Damore and Steve Grout, who have done so much for our community, helped develop our collaboration infrastructure, with emphasis on the Internet aspect, which is increasingly important for our community. Most recently, Joe helped us to revamp our Web site at <http://tab.computer.org/dac>. Finally, we started planning for a busy 2007. There are several projects underway, such as an overall community EDA-relevant calendar, a "State of the EDA" article that will appear here first (at least a summary), and more visibility in EDA conferences through several invited speeches. Stay tuned, and please feel free to send any suggestions.

From a broader perspective, various standardization efforts are underway in our industry, and in the semiconductor industry in general, in areas that have traditionally not been standardized. These include processor architectures, power consumption and analysis information, and physical design information. Watch this space for updates on further efforts. There's an increasing trend toward involving the IEEE in these efforts—for example, in design for manufacturability (DFM) and electronic system-level (ESL) design—thus, showing a growing trend toward collabora-

tion. Acquisitions and partnerships are still showing signs of activity, especially in these two areas, which should have a strong impact on the technical activity behind DFM and ESL businesses. Throughout the remainder of the year, DATC will predict, recognize, and leverage these trends to drive technical direction, while increasingly collaborating with consortia, councils, and emerging analysts.

Juan-Antonio Carballo
DATC chair

FROM THE NEWSLETTER EDITOR

Technical information exchange is key to meeting the challenges of the future. That's why Juan-Antonio Carballo and the rest of the DATC executive committee are devoted to expanding our horizons and offering a forum for ideas. Please help us! We can be easily reached by e-mail, and we are eager to hear from our members. Please view our DATC Web site and send us your comments. Tell us how we can serve you and design automation in general—this wonderfully challenging and rewarding field that we're privileged to be a part of.

Joe Damore
Newsletter Editor

CALENDAR

IEEE Computer Society Annual Symposium on VLSI

Porto Alegre, Brazil
9-11 May 2007
<http://www.inf.ufrgs.br/isvlsi2007>

10th Euromicro Conference on Digital System Design (DSD): Architectures, Methods and Tools

Lübeck, Germany
29-31 August 2007
<http://www.dsdconf.org>

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Design Automation). In addition, the International Federation for Information Processing (IFIP) is a technical cosponsor.

FOR HISTORICAL REASONS, and because embedded-systems research and development is firmly established in North America, Europe and Asia, ESWEEK adopted a loose rotation schedule that includes holding the event in these three continents. ESWEEK's pioneering formula of combining technically strong, complementary events in one location, under one registration, has proven successful for two years in a row. We are confident that ESWEEK will

continue to offer attendees the best forum on research and development in embedded systems for years to come. ESWEEK 2007 will be held in Salzburg, Austria, from 30 September to 5 October 2007. Come and check it out for yourself! ■

■ CONTRIBUTIONS TO CONFERENCE REPORTS: Send conference reports to Yervant Zorian, Virage Logic, 47100 Bayside Parkway, Fremont, CA 94538; zorian@viragelogic.com.

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