

July 2013



IEEE Council on Electronic Design Automation

CEDA Helps Make DAC A Great Success

DAC, the flagship conference of the EDA industry, just concluded its 50th conference this June in Austin, Texas. As Brian Bailey remarked in *EE Times*, "There was a lot of speculation leading up to DAC about the effectiveness of holding the conference in Austin. ... Now we have the official numbers and ... DAC was a success by every measure you can think of" (B. Bailey, "DAC in Austin: Success or Failure," *EE Times*, blog, 11 June 2013).

A primary reason for DAC's success was the grassroots work of the IEEE Central Texas CEDA Chapter (led by Zhuo Li), the Design Automation Technical Committee (led by Chuck Alpert), and the IEEE Central Texas Section (led by Kenny Rice). Together, along with the DAC executive committee and Rajesh Raina from Freescale Semiconductor, they formed the Austin Local Committee, which made it their mission to bring new people to DAC from Central Texas.

They worked tirelessly, promoting the Designer Track, helping form the Designed in Texas part of the program, and holding promotions at different companies (such as IBM, Intel, AMD, Freescale Semiconductor, Qualcomm, and ARM) to sign designers up for the DAC show. These efforts led to a majority of the 2,354 exhibitor-only attendees that showed up at DAC. In fact, it is estimated that about 60 percent of those at DAC were attending the conference for the first time.

This model was so successful that DAC plans to partner with CEDA volunteers in the San Francisco Bay area in order to form a local committee to promote the 2014 conference.

Call for Papers for ESWeek 2013

Papers are solicited for Embedded Systems Week 2013, the premier event covering all aspects of embedded systems and software. ESWeek brings together three leading conferences, two symposia, and several workshops and tutorials, letting attendees benefit from a wide range of topics covering the state of the art in embedded systems R&D. This year, ESWeek will take place in Montreal from September 29 to October 4. Registered attendees will be allowed to attend sessions in the other conferences and tutorials for free: CASES (International Conference on Compilers, Architecture, and Synthesis for Embedded Systems), CODES+ISSS (International Conference on Hardware-Software Codesign and System Synthesis), and EMSOFT (International Conference on Embedded Software). Please note that symposia and workshops may require separate registration.

CASES is a forum for researchers, developers, and practitioners to exchange information on emerging technologies and the latest advances in compilers and architectures for high-performance embedded systems design and synthesis. CASES uniquely aims to promote synergies across otherwise vertically integrated communities in embedded systems.

CASES seeks original research papers that focus on increasing the efficiency and capabilities of embedded systems via creative approaches that combine compiler, architecture, and synthesis technologies. Such solutions must address the challenges of bringing embedded systems to the market place, including new capabilities, faster time to market, lower costs, and improvements in power consumption or real-time behavior.

CODES+ISSS is the premier event on the design, modeling, analysis, and implementation of modern embedded systems, from system-level specification and optimization to hardware and software implementation. The conference invites contributions on specification, modeling, design, analysis, and implementation of embedded systems. CODES+ISSS covers a wide range of design issues and applications relevant to important embedded-system quality metrics, including performance, cost, power consumption, reliability, security, and usability.

EMSOFT brings together researchers and developers from academia, industry, and government to advance the science, engineering, and technology of embeddedsoftware development. EMSOFT has been the premier venue for cutting-edge research in the design and analysis of software that interacts with physical processes, with a

CEDA Currents is a publication of IEEE CEDA. Please send contributions to Jose L. Ayala (<u>layala@fdi.ucm.es</u>). © 2013 IEEE. All rights reserved. long-standing tradition for results in cyber-physical systems, comprising computation, networking, and physical dynamics.

The two symposia that will be held during ESWeek are ESTIMedia (IEEE Symposium on Embedded Systems for Real-Time Multimedia) and RSP (IEEE International Symposium on Rapid System Prototyping).

ESTIMedia brings together people from different multimedia-related research communities to discuss innovative ideas and solutions related to embedded systems for realtime multimedia.

RSP considers prototyping as an iterative design approach for embedded hardware and software systems. RSP aims to achieve rapid system prototyping of actual software and hardware systems. RSP seeks original contributions that address theoretical and practical methodologies, and new approaches for specification, completeness, dynamics of change, technology insertion, complexity, integration, and time to market.

Along with these three conferences and two symposia, ESWeek will also hold several workshops.

For more information, please visit the ESWeek website: <u>http://www.esweek.org</u>.

IEEE Awards 2013

The Hilton San Diego Bayfront Hotel in California recently held the IEEE Honors Ceremony. IEEE President Peter Staecker served as the Master of Ceremonies, along with IEEE President-Elect Roberto de Marca. This year's theme was "Accelerating Advances."

Irwin Mark Jacobs, founding Chair and Chief Executive Emeritus of Qualcomm was recognized for the IEEE Medal of Honor, IEEE's highest-level award. In addition, 19 IEEE Medals and Recognition Awards were presented for various areas, including wireless communications, photonics, navigation, space exploration, and nanotechnology and bioengineering.

For details, please visit <u>http://www.ieee.org/awards</u>.

Papers in IEEE Embedded Systems Letters

The top-five accessed articles from *IEEE Embedded Systems* Letters in May 2013 were as follows:

- "<u>Reconfigurable Computing in Next-Generation</u> <u>Automotive Networks</u>," by S. Shreejith, S.A. Fahmy, and M. Lukasiewycz
- "Softcore Processor Optimization according to <u>Real-Time Application Requirements</u>," by B. Le Gal and C. Jego
- "<u>Formal Methods for Early Analysis of Func-</u> tional Reliability in Component-Based Embedded Applications," by A. Hazra et al.
- "<u>Hardware-Assisted Detection of Malicious</u> <u>Software in Embedded Systems</u>," by M. Rahmatian et al.
- "Wireless Sensor Networks for Pilgrims Tracking," by M. Mohandes et al.

Upcoming Conferences	
(David Atienza, david.atienza@epfl.ch)	
<u>PATMOS</u>	Karlsruhe, Germany, 9-11 Sept. 2013
ESWeek	Montreal, 29 Sept. – 4 Oct. 2013
<u>FMCAD</u>	Portland, Oregon, 20-23 Oct. 2013
ICCAD	San Jose, California, 18-21 Nov. 2013

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IEEE Embedded Systems Letters is open for submissions. Visit mc.manuscriptcentral.com/les-ieee

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