# Currents



### IEEE Council on Electronic Design Automation

#### Sneak Preview of DAC 2015

The 2015 <u>Design Automation Conference</u> (DAC) will take place in San Francisco on 7-11 June 2015. This year, the DAC program will focus on five key technology topic areas: EDA, embedded systems and software (ESS), automotive systems and software, IP, and hardware security. Here is a sneak preview of some of the exciting things you can look forward to at this year's conference.

#### Technical Panel Highlights

The panels developed for DAC 2015 will be very engaging for the broad base of conference attendees. This year, the technical panels will be centered around DAC's five focused technology topics (listed above). There are several EDA- and ESS-centered panels planned.

The program will also offer a panel on Internet of Things (IoT), specifically discussing communication aspects. The panel sessions at the conference will also include an automotive panel on the much stricter reliability requirements of automotive components. Finally, there will be a security panel that will consider the security threats brought upon us by our own computing hardware.

#### **Automotive Track**

For the second year, DAC will host an Automotive Track comprising several invited sessions that will focus on the design tools, processes, and techniques required to develop complex electrical and electronic control systems enabling today's automobiles.

#### **Hardware Security**

With an urgent need to create, analyze, evaluate, and improve the hardware base of contemporary security solutions, DAC added a Hardware/Software Security Track to the program last year. This track has had an overwhelming response, both in terms of attendance and submissions, and DAC will once again offer the track this year.

#### SKYTalks SKYTalks

Complementing DAC's daily keynote presentations will be six engaging and thought-provoking SKYTalks (minikeynotes), which will be presented in the DAC Pavilion on the exhibition floor.

All in all, DAC 2015 promises not only to remain on the forefront of electronic design but also to offer outstanding training, education, exhibits, and networking opportunities. For more information, please visit <a href="http://www.dac.com">http://www.dac.com</a>.

### New CEDA Award Supports Participation at IEEE Women in Engineering Conference

CEDA is offering conference travel awards to help three participants attend the 2nd IEEE Women in Engineering International Leadership Conference (WIE-ILC), which is taking place 23-25 April 2015 in San Jose, California. The goal of this new award is to increase diversity in EDA and, in particular, to help increase the number of women and minorities at leadership positions in academia and industry in the EDA field.

The awards tentatively will help the following attend the conference: one mid-career woman in EDA (associate professor, senior researcher, etc.); one early-career woman in EDA (researcher or engineer with less than three years of experience, assistant professor, etc.); and a CEDA representative who has worked on CEDA committees or chapters within the past two years.

Awardees are expected to provide a brief overview of their experiences and recommendations to the IEEE CEDA Executive Committee after attending the conference, and also to help build a more diverse EDA community in the upcoming years.

Award decisions will be announced on 6 March 2015.

#### CEDA Taipei Chapter Update

The CEDA Taipei Chapter was founded in late 2010. Current officers include Chair Ting-Chi Wang (National Tsing Hua University), Vice Chair Hung-Ming Chen (National Chiao Tung University), and Secretary and Treasurer Tai-Chen Chen (National Central University).

In 2014, the chapter organized two meetings and eight seminars. The chapter also technically or financially cosupported two EDA forums, one EDA workshop, and one conference (the VLSI Design CAD Symposium).

The 2014 EDA Workshop was held on 6-7 December 2014 in Taoyuan City, Taiwan. The workshop program included two keynotes, one panel discussion, two research presentation sessions, one award ceremony (2014 domestic CAD contest), and one CEDA Taipei Chapter meeting. The workshop attracted 165 participants, including 29 university professors, nine industry experts, and 127 students. Please visit <a href="http://eda.el.cycu.edu.tw">http://eda.el.cycu.edu.tw</a> for details.

In the 2014 CAD contest at the IEEE/ACM International Conference on Computer-Aided Design (ICCAD), Taiwan teams received six awards, including one first-place award, three second-place awards, and two third-place awards. The 2014 domestic CAD contest was also very successful, attracting 129 teams, including both undergraduate and graduate students.

To learn more about the CEDA Taipei Chapter, please contact Ting-Chi Wang (tcwang@cs.nthu.edu.tw). Any suggestions to further improve the chapter are welcome.

## Papers in IEEE Embedded Systems Letters Papers in IEEE Embedded Systems Letters

The top-five accessed articles from *IEEE Embedded* Systems Letters in December 2014 were as follows:

- "Efficient Jammed Area Mapping in Wireless Sensor Networks," by A. Azim et al.
- "A Security Layer for Smartphone-to-Vehicle <u>Communication over Bluetooth</u>," by A. Dardanelli et al.
- "An Embedded Architecture for Energy- Efficient Stream Computing," by A. Panda and K. S. Chatha
- "Function-Level Processor (FLP): A High Performance, Minimal Bandwidth, Low Power Architecture for Market-Oriented MPSoCs," by H. Tabkhi, R. Bushey, and G. Schirner
- "Smartphone-Based Vehicle-to-Driver/Environment Interaction System for Motorcycles," by C. Spelta et al.

Upcoming Conferences (David Atienza, david.atienza@epfl.ch)	
<u>DATE</u>	Grenoble, France, 9-13 March 2015
<u>LATS</u>	Puerto Vallarta, Mexico, 25-27 March 2015
<u>EDPS</u>	Monterey, California, 23-24 April 2015
<u>GLSVLSI</u>	Pittsburgh, Pennsylvania, 20-22 May 2015
<u>DAC</u>	San Francisco, 7-11 June 2015

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

#### IEEE COUNCIL ON ELECTRONIC DESIGN AUTOMATION

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