CEDA

IEEE Council on Electronic Design Automation

Richard Newton Technical Impact Award

The ACM Special Interest Group on Design Automation and the IEEE Council on EDA, through a joint awards committee, have unanimously decided to give Randall E. Bryant (Carnegie Mellon University) the ACM/IEEE A. Richard Newton Technical Impact Award in Electronic Design Automation.

The purpose of this award is to honor a person or persons for an outstanding technical contribution within the scope of EDA, as evidenced by a paper published at least 10 years before the presentation of the award at the Design Automation Conference (DAC). The award is based on the impact of the paper's contribution.

The award to Bryant recognizes the impact of his paper, "Graph-Based Algorithms for Boolean Function Manipulation" (*IEEE Trans. Computers*, vol. 35, no. 8, 1986, pp. 677-691), which describes his work in developing reduced ordered binary decision diagrams. This work formed the foundation for symbolic manipulation of logic designs, which has had a broad impact on academia and industry.

Donatella Sciuto, Nominations and Appointments Committee

CEDA Distinguished Service Award

The CEDA Executive Committee has unanimously chosen Al Dunlop, Giovanni (Nanni) De Micheli, and Dick Smith as the recipients of the first CEDA Distinguished Service Award for their invaluable contribution to CEDA's formation.

Over the years, EDA activities, conferences, and publications have developed in several different IEEE societies. The IEEE Computer Society created a Design Automation Technical Committee and a Design Automation Standards Committee. The IEEE Circuits and Systems Society (CASS) set up the Computer-Aided Network Design Committee (CANDE) and *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems* (*TCAD*). At the CANDE 2002 and CANDE 2003 workshops, there was a growing interest in developing an organization more focused on EDA. Toward the end of 2003, Al Dunlop decided to pursue this goal.

In Spring 2004, Al worked with Nanni De Micheli on a plan to create a CAD council. Nanni was familiar with IEEE procedures for establishing new organizations. The new council would engage with societies as its members. As an IEEE council, CEDA would be in a perfect position to coordinate CAD-related technical activities spread across multiple societies. This seemed like the ideal structure for what Al and Nanni had in mind. Together, they discussed the idea with the different groups in IEEE that would ultimately need to approve the new council. In May 2004, they met with the Technical Activities Board (TAB) Strategic Planning Committee, the TAB Finance Committee, and the TAB Management Committee, and began to build support for the concept.

They also talked with the IEEE CASS Board of Governors and gained their support as well. On 23 May 2004, after much discussion, this board voted unanimously to propose the new CAD council to IEEE and established a committee to refine the concept. This was a bold and critical first step, made by these forward-thinking board members.

Dick Smith, who had also promoted the idea within IEEE CASS, was an active contributor on the committee, along with Al and Nanni. Dick took the lead on creating the council's constitution and bylaws.

Eventually, the council's name evolved to become the Council on EDA (CEDA), which was acceptable to most people.

Dick had the unique notion of adding Technical Member Organizations (TMOs) to the CEDA Board of Governors to represent the entities contributed by the societies. No other IEEE organization has this concept.

Armed with strong IEEE Computer Society and IEEE CASS support, Al and Nanni went to the IEEE TAB to seek approval of CEDA. Establishing a new society or council in IEEE is a major undertaking that goes through a stringent review and approval process from the Management and Finance Committees of the TAB. At the February 2005 TAB meeting, after many submeetings, Al, Nanni, and Dick received TAB's Phase 1 approval. Al then worked with the officers of the IEEE Computer Society and IEEE CASS on the final terms for transfer-

ring assets, and on creating an initial budget and set of milestones for CEDA.

CEDA received one-third of the sponsorship of DAC, one-third of the sponsorship of the IEEE/ACM International Conference on Computer-Aided Design (ICCAD), 2% of the sponsorship of the Design, Automation and Test Conference (DATE), and full ownership of *TCAD* (to be transitioned over a period of five years).

At the June 2005 TAB meeting, the formation of the new Council on EDA was approved, and Al Dunlop was named as the acting president until the first elections. Not surprisingly, those elections then confirmed Al as CEDA president for 2006 and 2007.

From this brief history of the development of CEDA, it's clear that Al Dunlop was the initiator, driver, and executor of the tremendous effort required to create this new IEEE Council on EDA. Nanni was Al's partner, and he helped form the initial idea; he also knew the most about IEEE procedures. Moreover, he helped promote the concept within IEEE and the sponsoring societies. Thus, Nanni's contribution was essential. Dick Smith was the third major contributor. He promoted the idea within IEEE CASS, wrote the CEDA constitution and bylaws, and invented the notion of TMOs, which provide a voice to the major EDA conferences, publications, and technical committees on the CEDA Board of Governors.

There is a clear line that distinguishes the contributions of Al, Nanni, and Dick, and confirms their worthiness for the CEDA Distinguished Service Award. These three had the vision to see the benefits of consolidating the EDA activities within IEEE, and the skill and drive to make it happen.

Andreas Kuehlmann, president of CEDA

Nominations for CEDA Early Career Award

The CEDA Early Career Award recognizes an individual in the early stages of his or her career who has made innovative and substantial technical contributions in the area of EDA. This award will be presented at this year's ICCAD (which will be held on 7-11 Nov. 2010 in San Jose, California). Full members of IEEE at any level (regular, senior, or fellow), whose highest educational degree has been awarded no more than eight years prior to the date of the nomination deadline, are eligible.

The award will be based on contributions to the field of EDA. Contributions will be measured according to technical merit and creativity in performing research. Such contributions will be assessed on the basis of the published record of the individual and the references accompanying the nomination.

The award is intended to be equally available to contributors from academia and industry. Some of the specific criteria used will include the current and potential impact of the individual's specific technical contributions, as well as contributions to the profession at large. More information is available at www.c-eda.org.

Papers in IEEE Embedded Systems Letters

The top-five accessed articles from *IEEE Embedded Systems Letters* during February 2010 were as follows:

- "An Analyzable Memory Controller for Hard Real-Time CMPs," by M. Paolleri et al.

- "Embedded Software Design of Scalable Low-Area Elliptic-Curve Cryptography," by M.N. Hassan et al.

- "Hardware Resource Virtualization for Dynamically Partially Reconfigurable Systems," by H. Chun-Hsian et al.

- "Temperature Compensated Time Synchronization," by T. Schmid et al.

- "Optimizing Bandwidth of Call Traces for Wireless Embedded Systems," by R. Shea et al.

Upcoming Conferences (Bill Joyner, william.joyner@src.org)	
MPSOC	Gifu, Japan, 28 June-2 July 2010
MEMOCODE	Grenoble, France, 26-28 July 2010
FMCAD	Lugano, Switzerland, 20-23 Oct. 2010
ICCAD	San Jose, California, 7-11 Nov. 2010

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