

36th DAC Awards

1999 IEEE Fellows

Aart J. de Geus - Synopsys, Inc., Mountain View, CA • For leadership in developing and commercializing logic synthesis technology
Pinaki Mazumder - Univ. of Michigan, Ann Arbor, MI • For contributions to the field of VLSI design

1998 ACM Kanellakis Award

The 1998 ACM Kanellakis Award for Theory and Practice was awarded to:

Randal E. Bryant - Carnegie Mellon Univ., Pittsburgh, PA
Edmund M. Clarke, Jr. - Carnegie Mellon Univ., Pittsburgh, PA
E. Allen Emerson - Univ. of Texas, Austin, TX
Kenneth L. McMillan - Cadence Design Systems, Inc., Berkeley, CA
for their invention of: "Symbolic Model Checking"

IEEE Transaction on CAD Best Paper Award

A. Odabasioglu, M. Celik, L.T. Pileggi - Carnegie Mellon Univ., Pittsburgh, PA
PRIMA: Passive Reduced-Order Interconnect Macromodeling Algorithm Vol. 17 No. 8 Aug. 1998
For improvements on model reduction of large LTI systems with guaranteed passivity and high accuracy/efficiency

IEEE Transaction on VLSI Best Paper Award

Scott Hauck, Gaetano Borriello, Carl Ebeling
Mesh Routing Topologies for Multi-FPGA Systems Vol. 6 No. 3 Sept. 1998
For contributions to the theory and practice of of interconnect topologies for FPGAs.

1999 SIGDA Distinguished Service Awards

The Association for Computing Machinery/Special Interest Group on Design Automation (ACM/SIGDA) presents its Distinguished Service Award to Professor C.L. Liu, National Tsing Hua University, Hsinchu, Taiwan, ROC, for contributions to the Design Automation Community and for creating the journal ACM Transactions on Design Automation of Electronic Systems (TODAES).

1999 SIGDA Doctoral Thesis Awards

- Inaugural Winner - **Dirk Stroobandt** - Univ. of Ghent, Ghent, Belgium, for:
Analytical Methods for a priori Wire Length Estimates in Computer Systems.
- Honorable Mention - **Naresh Maheshwari** - Iowa State Univ., Ames, Iowa, for:
Fast Algorithms for Retiming Large Digital Circuits.

1999 Best Paper Award

This year, awards were made for the best papers in four categories. Winners were determined from detailed reviews of the accepted papers in the technical sessions. Each award is accompanied by a plaque and a cash award of \$400. The awards are given by ACM/SIGDA (Special Interest Group on Design Automation), IEEE/CAS (Institute of Electrical and Electronics Engineers/Circuits and Systems Society) and EDA Consortium (Electronic Design Automation Consortium).

Physical and Electrical Design Modeling, and Estimation

Paper 6.1: Area Optimization of VLSI Power/Ground Networks Via Sequence of Linear Programmings
Authors: **Xiangdong Tan, C.J. Richard Shi, Dragos Lungeanu** **Jyh-Chwen Frank Lee, Li-Pen Yuan**
Affiliation: Univ. of Washington, Seattle, WA Avant! Corp., Fremont, CA

Logic-Level Testing, Simulation and Synthesis

Paper 42.2: *Improving the Test Quality for Scan-Based BIST Using a General Test Application Scheme*
Authors: **Huan-Chih Tsai, Kwang-Ting Cheng** **Sudipta Bhawmik**
Affiliation: Univ. of California, Santa Barbara, CA Lucent Technology, Princeton, NJ

High-Level Synthesis, Verification, and Co-Design

Paper 18.1: *Coverage Estimation for Symbolic Model Checking*
Authors: **Yatin V. Hoskote, Timothy Kam, Xudong Zhao** **Pei-Hsin Ho**
Affiliation: Intel Corp., Hillsboro, OR Synopsys, Inc., Beaverton, OR

Design Methodology

• System Level Design Methodology

Paper 4.1: *Common Case computation: A High Level Power Optimization Technique*
Authors: **Ganesh Lakshminarayana, Anand Raghunathan** **Kamal S. Khouri**
Affiliation: NEC USA, Princeton, NJ Princeton Univ., Princeton, NJ
Author: **Sujit Dey, Niraj K. Jha**
Affiliation: Univ. of California at San Diego, La Jolla, CA

• Technology Driven Design Methodology

Paper 28.1: *Reducing Cross Coupling Among Interconnect Wires in Deep Sub-micron Datapath Design*
Author: **Joon-Seo Yim** **Chong-Min Kyung**
Affiliation: LG CIT, Seoul, Korea KAIST, Taejeon, Korea

Advancement in Computer Science and Electrical Engineering Undergraduate Scholarships

The objective of the ACSEE Scholarship program is to increase the pool of professionals in Electrical Engineering and Computer Science from under-represented groups (Women, African American, Hispanic, Native American, and Physically Challenged). In 1989, ACM Special Interest Group on Design Automation (SIGDA) began providing the program. Beginning in 1993, the Design Automation Conference provides the funds for the scholarship and SIGDA continues to administer the program for DAC. DAC normally funds two \$4000 scholarships renewable up to 5 years to graduating high school seniors. In 1999 the IEEE Circuits and Systems Society also sponsored one scholarship. The 1999 winners will be announced at the Conference. The 1998 winners were:

1998 DAC ACSEE Undergraduate Scholarships

DAC \$4K: **Rashadd Hines**, Chicago, IL - attending Howard Univ.

DAC \$4K: **Brian Kevin McCabe**, Holbrook, AZ - attending Arizona State Univ.

For more information about the ACSEE scholarship, please contact Dr. Cherrice Traver, EE/CS Department, Union College, Schenectady, NY 12308 email: traverc@doc.union.edu.

Design Automation Conference Graduate Scholarships

Each year the Design Automation Conference sponsors several \$24,000 scholarships to support graduate research and study in Design Automation (DA), with emphasis in "design and test automation of electronic and computer systems". Each scholarship is awarded directly to a university for the Faculty Investigator to expend in direct support of one or more DA graduate students.

The criteria for granting such a scholarship expanded in 1996 to include financial need. The criteria are: the academic credentials of the student(s); the quality and applicability of the proposed research; the impact of the award on the DA program at the institution; and financial need. Preference is given to institutions that are trying to establish new DA research programs.

Information on next year's DAC scholarship award program will be available on the DAC World Wide Web page at: <http://www.dac.com>, under general information and then 37th DAC scholarship program.

Design Automation Conference Graduate Scholarship Awards

- Prof. **John Lillis** of the University of Illinois, Chicago, IL, for **Sung-Woo Hur** and **Ashok Jagannathan**. Their project is entitled, *New Techniques for Timing-Driven Placement*.
- Prof. **Miodrag M. Potkonjak** of the University of California, Los Angeles, CA, for **Darko Kirovski** and **Gang Qu**. Their project is entitled, *Intellectual Property Protection for VLSI CAD*.
- Prof. **Srinivas Katkoori** of the University of South Florida, Tampa, FL, for **Stelian Alupoaei** and **Udaykumar Anumalachetty**. Their project is entitled, *RT-Level Route-and-Place Design Methodology for Delay and Power Optimization in DSM Regime*.

Design Automation Conference Graduate Scholarship Committee

The 1999 DAC Scholarship Committee was comprised of the following people:

James P. Cohoon - University of Virginia (Chair)

Michael Lightner - University of Colorado

Sylvia Nesson - Synopsys, Inc.