

Marie R. Pistilli Women in EDA Achievement Award

Mary Jane Irwin - A. Robert Noll Chair of Engineering, Penn State Univ., University Park, PA
For her significant contributions in helping women advance in the field of EDA technology.

The P. O. Pistilli Undergraduate Scholarships for Advancement in Computer Science and Electrical Engineering

The objective of the P. O. Pistilli Scholarship program is to increase the pool of professionals in Electrical Engineering, Computer Engineering and Computer Science from under-represented groups (women, African American, Hispanic, Native American, and physically challenged). In 1989, the ACM Special Interest Group on Design Automation (SIGDA) established the program. Beginning in 1993, the Design Automation Conference provided the funds for the scholarship, and SIGDA continues to administer the program for DAC. DAC normally funds two or more \$4000 scholarships, renewable up to 5 years, to graduating high school seniors. In 1999 the IEEE Circuits and Systems Society also began to sponsor these scholarships.

The 2003 winners were:

Julie Louise Sandberg - attending Univ. of Wyoming for computer engineering.

Krystal Verne Watson - attending Cornell Univ. for computer engineering.

For more information about the P. O. Pistilli scholarship, please contact Dr. Cherrice Traver, ECE Dept., Union College, Schenectady, NY 12308. email: traverc@union.edu

2004 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.

Profs. **Jiang Hu**, Texas A&M Univ., College Station, TX

Student: **Chin-Ngai Sze**

Integrated Placement and Skew Optimization for Variation Tolerant and Low Power Clock Network

Prof. **Adrian Nunez-Aldana**, Syracuse Univ., Syracuse, NY

Students: **Amit Varde, Chandrasekar Rajagopal**

Synthesis of High-Performance Digital Circuits

Information on next year's DAC scholarship award program will be available on the DAC web page:
<http://www.dac.com>.

DAC/ISSCC 2004 Student Design Contest Winners

Operational Category:

- 1st Place (Best Overall)** *A Single Chip Ultra-Wideband Transceiver*
Fred S. Lee, Anantha P. Chandrakasan, Raúl Blázquez - Massachusetts Institute of Tech., Cambridge, MA
Puneet P. Newaskar – Silicon Labs., Inc., Austin, TX
- 2nd Place** *81 MS/s JPEG 2000 Single-Chip Encoder with Rate-Distortion Optimization*
Hung-Chi Fang, Yu-Wei Chang, Liang-Gee Chen – National Taiwan Univ., Taipei, Taiwan
- 3rd Place (tie)** *An 80Gbps FPGA Implementation of a Universal Hash Function Based Message Authentication Code*
Bo Yang, Ramesh Karri – Polytechnic Univ., Brooklyn, NY,
David A. McGrew – Cisco Systems, Inc., San Jose, CA
- 3rd Place (tie)** *A Modular 32-Site Wireless Neural Stimulation Microsystem*
Maysam Ghovanloo, Khalil Najafi – Univ. of Michigan, Ann Arbor, MI

Conceptual Category:

- 1st Place** *The Economical Aphotc Sieving Machine*
Kamran Kashef, Matt Hardy – Univ. of Michigan, Ann Arbor, MI
- 2nd Place** *VIRAMI: A Media_Oriented Vector Processor with Embedded DRAM*
Joseph Gebis, Sam Williams, David Patterson – Univ. of California, Berkeley, CA
Christos Kozyrakis - Stanford Univ., Palo Alto, CA
- 3rd Place** *SiGe Prototype Chip Design Implementing CMOS Fixed Bit-Load Drivers and Receivers for Next Generation High-Speed Board-Level Interconnect*
Jason D. Bakos, Amit Gupta, Leo Selavo, Donald Chiarulli – Univ. of Pittsburgh, Pittsburgh, PA

ACM Transaction on Design Automation of Electronic Systems (TODAES) 2004 Best Paper Award

Viktor S. Lapinskii, Margarida F. Jacome, Gustavo A. DeVeciana - Univ. of Texas, Austin, TX
Cluster Assignment for High-Performance Embedded VLIW Processors
Volume 7, Issue 3, July 2002.

The Association for Computing Machinery/Special Interest Group on Design Automation (ACM/SIGDA) presents its Distinguished Service Award

James P. Cohoon - Univ. of Virginia, Charlottesville, VA
For exemplary service to SIGDA, to ACM, to DAC, and to the EDA profession as a whole.

2003 Phil Kaufman Award for Distinguished Contributions to EDA

A. Richard Newton - Dean of the College of Engineering, Univ. of California, Berkeley, CA
Professor Newton's contributions to advancing the EDA industry are numerous and significant, directly impacting the success of our users - electronic designers," remarked Walden C. Rhines, EDA Consortium Chairman and Chairman and CEO of Mentor Graphics Corp. "Richard has been a visionary and catalyst for advancing our industry in his role as mentor, educator, researcher and entrepreneur."

IEEE CASS Mac Van Valkenburg Award

Gary D. Hachtel - Univ. of Colorado, Boulder, CO

For a distinguished career of fundamental innovations across the broad spectrum of semiconductor Electronic Design Automation: from process and device modeling through circuit simulation and optimization to logic synthesis and formal verification.

IEEE CASS Meritorious Service Award

Bing J. Sheu - Nassa Corp., Santa Clara, CA

For outstanding leadership and innovative/significant service contributions to CASS as Society President, Vice President, Editor-in-Chief, and Chair of numerous committees.

IEEE CASS Chapter-of-the-Year Award

France Chapter

Chapter Chair - **Amara Amara** - ISEP, Paris, France

Chapter Vice Chair - **Agnieszka Konczykowska** - Alcatel R&I / OPTO+, Marcoussis, France

Chapter Secretary - **Thomas Ea** - ISEP, Paris, France

2004 IEEE Fellows

Xuemin Chen - Broadcom Corp., San Diego, CA

For contributions to video coding standardization and its implementation for satellite and cable communication systems.

Rajesh K. Gupta - Univ. of California, San Diego, CA

For contributions to high-level synthesis and computer aided design of digital circuits and systems.

Graham R. Hellestrand - VaST Systems Technology Corp., Sunnyvale, CA

For contributions to computer system architecture simulations.

Xianlong Hong - Tsinghua Univ., Beijing, China

For contributions to the physical design of integrated circuits.

Leon Stok - IBM Thomas J. Watson Research Center, Yorktown Heights, NY

For the development and application of high-level and logic synthesis algorithms.

IEEE CASS Donald O. Pederson Award

Synthesis of Reversible Logic Circuits

IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, vol. 22, no. 6, pp. 710-722, June 2003.

Vivek V. Shende, Aditya K. Prasad, Igor L. Markov, John P. Hayes - Univ. of Michigan, Ann Arbor, MI

IEEE CASS Guillemin-Cauer Award

Phase Noise and Timing Jitter in Oscillators With Colored-Noise Sources

IEEE Transactions on Circuits and Systems - Part I: Fundamental Theory and Applications, vol. 49, no. 12, pp. 1782-1791, December 2002.

Alper Demir - Koc Univ., Sanyer-Istanbul, Turkey