Marie R. Pistilli Women in EDA Achievement Award

• Kathryn Kranen - President & CEO, Jasper Design Automation, Inc., Mountain View, CA
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, ACM Special Interest Group on Design Automation (SIGDA) began providing 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 five years, to graduating high school seniors.

The 2005 winners are:

Elizabeth Hong-An Boi Ha - attending Georgia Institute of Tech., Atlanta, GA
Helen You - attending Massachusetts Institute of Tech., Cambridge, MA

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

The SPICE Modernization Project

Prof. Elias Kougioumas - Dept. of Engineering Technology, Univ. of North Texas, Denton, TX

Student: Rahul Allawadhi

Spiral Inductor Synthesis for Mixed-Signal Systems

Prof. Yehia Massoud - Dept. of Electrical and Computer Engineering and Computer Engineering, Rice Univ., Houston TX

Student: Arthur Nieuwoudt

Information on next year’s DAC scholarship award program will be available on the DAC web site: http://www.dac.com.
Awards

ACM Transaction on Design Automation of Electronic Systems (TODAES) 2005 Best Paper Award

*Technology Mapping and Architecture Evaluation for k/m-macrocell-based FPGAs* • Volume 10, No. 1, January 2005, Pages:3 - 23.
- **Jason Cong** - Univ. of California, Los Angeles, CA
- **Hui Huang** - Sun Microsystems, Santa Clara, CA
- **Xin Yuan** -IBM Corp., Essex Junction VT

IEEE Circuits and Systems Society 2005 VLSI Transactions Best Paper Award

- **Radu Marculescu** - Carnegie Mellon Univ., Pittsburgh, PA
- **Girish Varatkar** - Carnegie Mellon Univ., Pittsburgh, PA

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

- **Mary Jane Irwin** - Penn State Univ., University Park, PA
For dedicated service as Editor in Chief of ACM Journal, TODAES (1998 - 2004), and many years of service to SIGDA, DAC, and the EDA profession.

2004 Phil Kaufman Award for Distinguished Contributions to EDA

- **Joe Costello** - Chairman and CEO of think3 and former Chairman and CEO of Cadence Design Systems, Inc.
For his business contributions that helped grow the EDA industry. Under his leadership (1987-1997), Cadence became the world's leading supplier of EDA software and services, and one of the top ten largest software suppliers in the world.

IEEE Circuits and Systems Society 2005 Darlington Award

- **Payam Heydari** - Univ. of California, Irvine, CA

IEEE Circuits and Systems Society 2005 Industrial Pioneer Award

- **Yervant Zorian** - Virage Logic Corp., Freemont, CA
For his contributions to design for test technology through Built-In Self-Test solutions and design tools that dramatically boosted the quality and reliability of digital systems and the efficiency of design and test engineers.
IEEE Circuits and Systems Society
2005 Outstanding Young Author Award

• Chris Hyung-Il Kim - Purdue Univ., Lafayette, IN

IEEE Circuits and Systems Society
2005 Donald O. Pederson Award

• Subhasish Mitra - Intel Corp., Folsom, CA
• Kee Sup-Kim - Intel Corp., Sacramento, CA

2005 IEEE Fellows

• Fadi Joseph Kurdahi - Univ. of California, Irvine, CA
For contributions to design automation of digital systems and to reconfigurable computing.

• David J. Comer - Brigham Young Univ., Provo UT
For leadership in engineering education and publication of electronic circuit design textbooks.

• Kartikeya Mayaram - Oregon State Univ., Corvallis, OR
For contributions to coupled device and circuit simulation.

• Chandu Visweswariah - IBM Corp., Yorktown Heights, NY
For contributions to large scale integrated circuits.

• Reinaldo Alvarenga Bergamaschi - IBM Corp., Yorktown Heights, NY
For contributions to the development of system design tools and methodologies.

• Domine Leenaerts - Phillips Research, Eindhoven, Netherlands
For contributions to nonlinear circuit theory and design.
DAC/ISSCC Student Design Contest

The purpose of the Student Design Contest is to promote excellence in the design of electronic systems by providing competition between graduate and undergraduate students at universities and colleges. This year we received over 50 submissions in two categories: "Conceptual" and "Operational". Operational designs are those which have been implemented and tested. Conceptual designs have not yet been fabricated and tested but must have been thoroughly simulated. Students compete for cash prizes donated by a number of industrial supporters, as well as the conference. Prize winners have been invited to show their work at the University Booth on the show floor. Awards will be given at the DAC Pavilion, on Wednesday, June 15, 2005 from 10:00 am - 10:45 am.

DAC/ISSCC 2005 Student Design Contest Winners

Operational Category:

1st Place  A 50MS/s (35mW) to 1kS/s (15uW) Power Scaleable 10b Pipelined ADC with Minimal Bias Current Variation
Imran Ahmed, David Johns - Univ. of Toronto, Toronto, ON. Canada

2nd Place  A 1.3 TOPS H.264/AVC Single-Chip Encoder for HDTV Applications
Tung-Chien Chen, Yu-Wen Huang, Chen-Han Tsai, To-Wei Chen, Ching-Yeh Chen, Liang-Gee Chen - National Taiwan Univ., Taipei, Taiwan

3rd Place  A Side-Channel Leakage Free Coprocessor IC in 0.18µm CMOS for Embedded AES-based Cryptographic and Biometric Processing
Kris Tiri, David Hwang, Alireza Hodjat, Bo-Cheng Lai, Shenglin Yang, Patrick Schaumont, Ingrid Verbauwhede - Univ. of California, Los Angeles, CA

Conceptual Category:

1st Place  Design and Implementation of a Fractional-N Frequency Synthesizer for Cellular Systems
Petrus J. Venter, Saurabh Sinha - Univ. of Pretoria, Pretoria, South Africa

2nd Place  A 1-V IEEE 802.11a/b/g-Compliant Receiver IF-to-Baseband Chip in 0.35µm CMOS for Low-Cost Wireless SIP
Pui-In Mak, Rui P. Martins - Univ. of Macau, Macao SAR, China
Seng-Pan U - Chipidea Microelectronics (Macau) Ltd., Macao SAR, China

3rd Place  Collision Detection System using an FPGA Implemented on the FPX Platform
Hasan N. Atay, Burhan Bayazit, John W. Lockwood - Washington Univ., St. Louis, MO

Award Contributors:

visit the DAC web site @ www.dac.com for more details