30 SSCS MEMBERS ELEVATED TO IEEE SENIOR STATUS IN FEBRUARY AND MARCH

Krste Asanovic
Alexander Awuviri
Benton Calhoun
Leland Chang
Manuel Delgado Restituto
Bruce Doyle
David Enright
Emerson Fang
Dennis Fischette
Vito Giannini
Christoph Grimm
Bhusan Gupta
Pavan V. Hanumolu
Christopher Holdenried
Chun-Ming Hsu
Christopher Hull
Takeshi Ikenaga
Hiroshi Inoue
Taechan Kim
Toshiro Kodera
Hasnain Lakdawala
Shinichiro Mutoh
Dicle Ozis
Paolo Pavan
Shanthi Pavan
Patrick Shea
Walter Snoeys
Johannes Solhusvik
Andrew Van Brocklin
Changqing Xu

IEEE Solid-State Circuits Society 2011–2012 Predoctoral Achievement Award Winners

For the academic year 2011–2012, the Society funded four awards: Kris Myny, IMEC; Meisam Nazari, California Institute of Technology, Pasadena; Kaushik Sengupta, California Institute of Technology, Pasadena; and Yahya Tousi, Cornell University.

Kris Myny
Krste Myny received his master’s degree in electrical engineering from the Katholieke Hogeschool Limburg in Diepenbeek, Belgium, in 2002, with chip design as his main interest. He joined IMEC in Leuven in 2004 as a member of the Polymer and Molecular Electronics group (PME). At the time organic technology in the PME group did not yet support complex digital design, so he joined with the perspective to bring this technology to the level that would enable it. Between 2004 and 2008, he actively contributed to this goal and, as a consequence, in September 2008, he started a Ph.D. program on the design of organic circuits. His main research interests are the design, fabrication, and optimization of digital organic circuits for organic RFID tags and AMOLED-backplanes, among other technologies. He hopes to realize several further actualizations of these during his career. As a designer, his link with technology is by far his major trump. He received the IMEC 2010 scientific excellence award.

Meisam Nazari
Meisam Honarvar Nazari received a B.Sc. degree from the University of Tehran, Iran, in 2005, an M.A.Sc. degree from the University of Toronto, Canada, in 2008, and an M.S. degree from the California Institute of Technology, Pasadena, in 2009, in electrical engineering. He is currently working toward a Ph.D. degree at the California Institute of Technology, Pasadena, where the focus of his research is high-performance, mixed-signal integrated circuits, especially high-speed and low-power optical and electrical interconnects. He received the University of Toronto Fellowship for Fall 2006 and an Atwood fellowship for Fall 2008. He is also the recipient of the 2008 Brian L. Barge Award for excellence in microsystems integration and the 2010 AMD/CICC Student Scholarship Award. In addition, he is an NVIDIA 2012 graduate fellowship finalist.
I have always been motivated by the sheer impact of electrical engineering on the everyday life of common people. Growing up in a developing nation, this was important to me. It initiated curiosity in the mind of an inquisitive undergraduate at IIT Kharagpur, India, and as I delved deeper into the field, it dawned on me that electrical engineering, as it stands today, is not just about electron motion but almost “anything under the sun.”

Diverse fields within electrical engineering, such as applied mathematics, physics, circuits, and biology, synergize under one umbrella that opens opportunities for work on a wide variety of high-impact and intellectually challenging problems. My research interests at Caltech have spanned terahertz sensing and imaging to optics, electromagnetics, stochastics, and novel EM and circuit designs for biomedical and clinical applications. Through the synergy of many allied fields, electrical engineering will organically grow, attract the best minds, and change peoples’ lives. I, for one, will strive to play my part.

—Kaushik Sengupta

Kaushik Sengupta

Kaushik Sengupta received the B.Tech. and M.Tech. degrees in electronics and electrical communication engineering, from the Indian Institute of Technology, Kharagpur, India, in 2007. He is working toward the Ph.D. degree at California Institute of Technology, Pasadena. During his undergraduate studies, he did research during the summers at USC and MIT. His research interests are in the areas of THz sensing and imaging, optics, electromagnetics, stochastics, and novel EM and circuit designs for biomedical and clinical applications. He was awarded the IBM Ph.D. fellowship for 2011–2012, IEEE Solid State Circuits Society Predoctoral Achievement Award, IEEE Microwave Theory and Techniques Graduate Fellowship, and Analog Devices Outstanding Student Designer Award in 2011. He also received the Prime Minister Gold Medal Award in 2007 from IIT, the Caltech Institute Fellowship, and most Innovative Student Project Award in 2007 from the Indian National Academy of Engineering.

Yahya Tousi

Yahya Tousi received his B.Sc. and M.Sc. degrees in electrical engineering from Sharif University of Technology in 2004 and 2006, respectively. In 2007 he joined Cornell where he is pursuing his Ph.D. in the Department of Electrical and Computer Engineering. His fascination with the field of Electrical Engineering stems from its many contributions to the growth of modern communication and medicine. He is interested in developing novel electronic interfaces to enhance the application scope of integrated circuits. His research is currently focused on mm-wave and terahertz integrated circuits with applications in communication and medical imaging. He is also interested in low-power mixed-signal circuits for high-speed data communication. He is the recipient of the Microwave Theory and Techniques Society Graduate Fellowship Award and the Jacobs Fellowship Award. He is also the winner of the graduate research competition in IMS 2011.

The SSCS Predoctoral Achievement Award

In 2011 the IEEE Solid-State Circuits Society replaced its original Predoctoral Fellowship with a new program called the Predoctoral Achievement Award, which provides a US$1,000 honorarium to each student and covers the cost of his or her attendance at ISSCC, including travel, conference registration and hotel, subject to certain limits.

Applications for 2012–2013 may be submitted from 1 September 2012 through 15 October 2012, with the winners announced by the end of November. Submission instructions can be found at http://sscs.ieee.org/predoctoral-achievement-award.html.

Chapter Mainstay Presents Talk at SSCS-Denver on Extending Hypertransport Technology to 8.0 Gb/s in 32-nm SOI-CMOS Processors

Bruce Doyle, chair of SSCS-Denver, presented a talk on 32-nm SOI-CMOS, previously delivered at the 2011 Asian Solid-State Circuits Conference to members and guests of the chapter at AMD, Fort Collins, on Friday morning, 27 January 2012.

After receiving the B.S.E.E. degree from Carleton University, Ottawa, Canada in 1984, Doyle has been involved in the design of memories, graphics processors, analog circuits, mixed-signal ICs, high-performance microprocessors, and leading edge I/O technologies.

From 2002 to 2006, he worked for Hewlett-Packard/Intel in Fort Collins, Colorado, on the Itanium family of