

Dr. Mahesh Mehendale Visits the IEEE SSCS/CAS Central Texas Chapter

Dr. Mahesh Mehendale, Texas Instruments fellow and director of the Nano-Power Foundational Technology Group at Kilby Labs, visited the IEEE Solid-State Circuits Society (SSCS)/IEEE Circuits and Systems Society (CAS) Joint Central Texas Chapter on 16 November 2018. He presented the seminar “Ultralow-Power Technologies for ‘Always-On’ Sensor Node Applications” at the University of Texas at Austin.

The comprehensive talk covered the latest industry trends for low-power sensor node computing systems. Mehendale also highlighted the technology needs for various subcomponents used in such sensor nodes. More than 40 participants attended, including graduate students and local professionals, many of whom are IEEE Members or Student Members. Following his talk, the audience asked questions, to which Mehendale provided very insightful answers.

—Jaydeep P. Kulkarni
Cochair, SSCS/CAS Central Texas Chapter

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Dr. Mehendale presents the talk “Ultralow-Power Technologies for ‘Always-On’ Sensor Node Applications.”



The talk attracted more than 40 attendees, including students and local professionals.

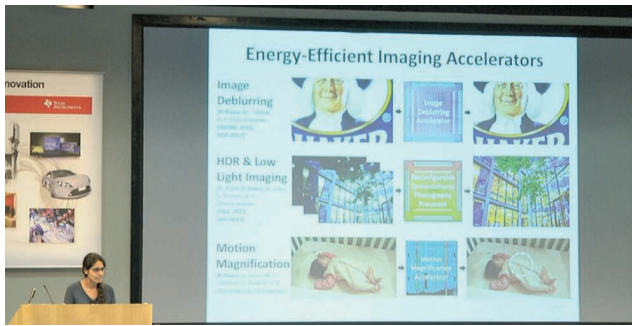
Recent Silicon Valley SSCS Chapter Activities: Talks, Seminars, Workshops, and DLs

The IEEE Solid-State Circuits Society Santa Clara Valley (SSCS-SCV) Chapter held a number of well-attended

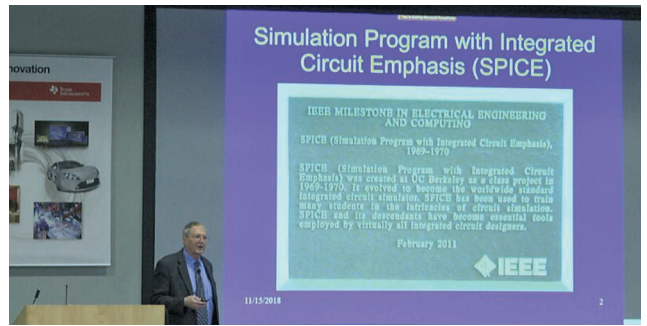
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seminars, webinars, workshops, and Distinguished Lecturer (DL) talks in the fall and winter of 2018. Highlights included talks by Prof. Priyanka Raina, on the use of efficient systems for computational photography; Dr. Laurence Nagel (recipient

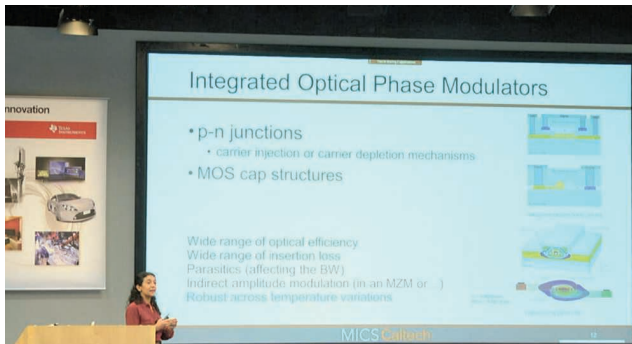
of the 2019 IEEE Donald O. Pederson Award in Solid-State Circuits), on the history of SPICE; Prof. Azita Emami, on the design of optical interconnects; and Dr. Daniel Bankman, on the mixed-signal implementation of machine learning. The SSCS-SCV



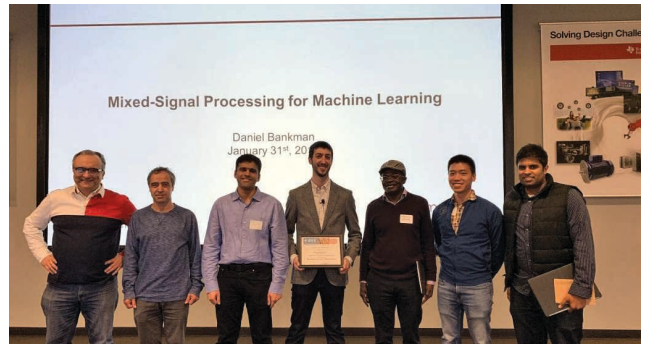
Prof. Raina explains efficient imaging accelerators during her talk for the SSCS SVC event.



During his talk for the SSCS SCB, Dr. Nagel shows a 2011 issue of IEEE Milestone featuring SPICE.



Prof. Emami presents her talk for the SSCS SVC.



Dr. Bankman (center) and the organizers of the SSCS SCV event.

Chapter collaborated with local Chapters of the IEEE Circuits and Systems Society, IEEE Computational Intelligence Society, IEEE Engineering in Medicine and Biology Society, IEEE Signal Processing Society, IEEE Computer Society, IEEE Nanotechnology Council, and the IEEE SCV Section.

18 October 2018: "Energy-Efficient Circuits and Systems for Computational Imaging and Vision on Mobile Devices," Priyanka Raina, Stanford University, California

Raina discussed energy-efficient circuits and systems for accelerat-

ing the processing requirements of computational photography targeting smart mobile devices.

15 November 2018: "The Life of SPICE," Laurence Nagel, Omega Enterprises Consulting

Nagel discussed the life of SPICE, the circuit simulation program used in our industry for nearly 50 years.

6 December 2018: "Holistic Design in Optical Interconnects," Azita Emami, California Institute of Technology, Pasadena

Emami covered a range of topics, including the design of optical interconnects.

31 January 2019: "Mixed-Signal Processing for Machine Learning," Daniel Bankman, Stanford University, California

Bankman discussed how best to integrate analog efficiency with digital scalability via mixed-signal processing for accelerating machine learning where energy-efficiency is a paramount.

—Mojtaba Sharifzadeh
Chair, Santa Clara Valley
SSCS Chapter

—Ali Keshavarzi
Advisor, Santa Clara Valley
SSCS Chapter

