

Department of Computer Science and Engineering

Presents

IEEE Solid State Circuits Society Distinguished Lecturer

Sreedhar Natarajan, Vice President, Taiwan Semiconductor Manufacturing Company (TSMC), Design Technology Canada.

Emerging Memories: Trends, Roadmaps & Challenges

With technology scaling, there is a substantial demand from market applications for high density, low power and high performance memory. Though many new technologies have emerged with varying potential, SRAMs and DRAMs continue to dominate the industry and will do so. This talk will outline the current trends in embedded memories, projected roadmaps and address the challenges surfacing from these new innovations. The talk will focus on the applications and what is required to make a successful and viable embedded memory in an SoC (System on Chip) or SIP (Silicon Intellectual Property).

Bio: Mr. Sreedhar Natarajan is currently Vice President at TSMC Design Technology Canada Inc. Prior to joining TSMC, he was the Founder & CEO of Emerging Memory Technologies Inc, a successful semiconductor Memory IP company, where he was responsible for the dominant growth and revenue in a very short period. Mr. Natarajan has a combined experience of 16 years in the semiconductor memory industry, his experiences includes working for Paradigm Technology, Texas Instruments, MoSys previously in the areas of SRAM, DRAM, FRAM and Memory Compilers.

Mr. Natarajan serves on many international conference committees such as ISSCC, CICC, ESSCIRC, ISLPED, SOC, VLSI Symposium. He has been an invited speaker at leading conferences and academic institutions and has hosted many panel discussions and tutorials at major international conferences. Mr. Natarajan served as the Guest Editor for IEEE Journal of Solid State Circuits. Mr. Natarajan is the recipient of the IEEE Circuits and Systems Outstanding Service Award'01 and the past chairman for the Dallas Chapter of the IEEE-Solid State Circuits. He has co-authored the book "SOI Design: Analog, Memory and Digital Design" and has over 25 patents to his credit. He is a strong advocate on new and emerging Memory Technologies to the semiconductor memory industry.

Mr. Natarajan obtained his Master's degree in computer engineering from University of Southwestern , Lafayette , LA. Mr. Natarajan is a Senior member for the Institute of Electrical and Electrical Engineers and an IEEE Distinguished Lecturer (2007-2008).

University at Buffalo – North Campus

414 Bonner Hall

Friday December 7, 2007 3:30pm-4:30pm

This talk is free and open to the public - Refreshments for attendees after the talk in 224 Bell Hall

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For more information, please call 645-3180