

The School of Electrical and Computer Engineering DISTINGUISHED SEMINAR SERIES 2016

The Distinguished Seminar Series of the School of Electrical and Computer Engineering (ECE) presents the work of internationally recognized researchers. This seminar series is intended to provide an open platform for the faculty and students, to have a dialog with leading researchers in various fields of ECE, and to build-up a dynamic and vibrant culture of research and academic exchange in the ECE department. All seminars are free and open to the public.



Technology, Computer Architecture and Memory 12:30 - 1:30 p.m. Thursday, September 29 | ATRC 102

Dr. Mark D Hill - Gene M. Amdahl and John P. Morgridge
Professor of Computer Sciences, University of
Wisconsin-Madison

Professor Hill is a senior computer architect at Wisconsin interested in parallel-computer system design, memory system design, and computer simulation. He developed the 3C cache miss taxonomy (compulsory, capacity, and conflict) and co-developed “sequential consistency for data-race free” that serves as a foundation of the C++ and Java memory models. He is a fellow of IEEE and the ACM, co-inventor on 35 patents, and taught more than 1000 students with 40 Ph.D. progeny so far. Hill has a PhD in computer science from the University of California, Berkeley and currently serves as Vice Chair of the Computer Community Consortium.

Seminar Abstract

First, this talk will discuss how challenges to Moore’s Law will open up new directions for computer systems, including architecture as infrastructure, energy first, impact of emerging technologies, and cross-layer opportunities. Second, the talk will delve into examples of cross-layer research driven by changes in memory due to the million-fold memory capacity growth, the introduction of general-purpose graphics processing unit computing, and non-volatile memory’s fusing of memory and storage. While computing gets the glory, remember that it is vast memory that makes most interesting computation possible!

Food provided at 12 P.M. - 12:30 P.M.

Food reservation can be made at the ES202 front desk one week prior to each seminar.



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Engineering, Architecture and Technology

Inquiries: Dr. Guoliang Fan

405-744-1547 or guoliang.fan@okstate.edu