INDUSTRIAL SPEAKER SERIES

Center for Embedded Computer Systems

Presents

Why Circuits Fail

Dr. Sani R. Nassif
IBM Research Labs, Austin, TX

Abstract

We live in a world where we increasingly depend on the electronic systems that surround us. What used to be in computers is now in our phones, cars, appliances, and even in greeting cards. We expect these systems to "just work". This talk will explore how the underlying CMOS circuits from which we build all these systems can fail, under what conditions -both internal and external, and what these failure trends look like for the future. The hope is that it will motivate students to look at alternative approached for circuit resilience.

Biography

Sani R. Nassif Sani received his PhD from Carnegie-Mellon university in the eighties. He worked for ten years at Bell Laboratories on various aspects of design and technology coupling including device modeling, parameter extraction, worst case analysis, design optimization and circuit simulation. He joined the IBM Austin Research Laboratory in 1996 where he is presently managing the tools and technology department, a bunch of eclectic individuals doing research on such diverse areas as formal verification, timing simulation and analysis, testing, low power design and thermo-electric cooling. He is a Fellow of the IEEE and a member of the IBM Academy of Technology.

Tuesday, November 10, 2009
Donald Bren Hall 3011
Talk begins at 1:30pm; Refreshments at 2:00pm

CECS Host: Fadi Kurdahi
For more information contact: Melanie Kilian at (949) 824-9127

UNIVERSITY OF CALIFORNIA, IRVINE