



Fall 2009 CIS Colloquium Series

Power and Thermal Management in Data Centers

Dr. Krishna Kant
(Intel Research, NSF CISE)

11am-Noon, Friday, October 16, 2009
Tech Center 111

Abstract: Fueled by burgeoning online services, power and thermal management in data centers are becoming critical for a variety of reasons including power densities, utility costs and environmental impact. In this talk, I will describe a variety of power/thermal challenges in data centers and discuss some approaches. In particular, I will talk about the notion of energy adaptive computing and its implications. I will also describe coordinated power management schemes and show how coordination can be exploited to squeeze out additional power savings while meeting the given QoS requirements.

Bio: Dr. Krishna Kant has been with Intel Corp since 1997 where he has worked in a variety of research areas including traffic characterization, security/robustness in the Internet, data center networking, utility computing, and power/thermal management of computer systems. He is currently on a visiting appointment with the National Science Foundation. From 1991 to 1997, he was with Telcordia Technologies (formerly Bellcore) and worked on SS7 signaling and congestion control. Prior to this, he was an Associate Professor of Computer Science at Penn State University. He is the author of the graduate text book “Introduction to Computer System Performance Modeling”, McGraw Hill 1992. He received his Ph.D. degree in Computer Science from University of Texas at Dallas in 1981.

Refreshments will be served!