



NSF CENTER FOR RESEARCH ON COMPLEX NETWORKS



NSC 128, 713-313-1290, TEXAS SOUTHERN UNIVERSITY ·3100 CLEBURNE AVENUE ·HOUSTON TX 77004

[HTTP://CS.TSU.EDU/CREST/](http://cs.tsu.edu/crest/)

CENTER RESEARCH SEMINAR

Technology Trends and Innovation

Mark E. Dean

John Fisher Distinguished Professor

Department of Electrical Engineering and Computer Science

University of Tennessee

Knoxville, TN 37996

Thursday, October 17, 2013

3:00 p.m. – 4:30 p.m.

Room 150 at Science Building

Biography

Mark E Dean is a John Fisher Distinguished Professor at the University of Tennessee (UT) College of Engineering. His research focus is in advanced computer architecture (beyond Von Neumann systems), data centric computing and computational sciences. Prior to joining UT, Dr. Dean was Chief Technology Officer of the Middle East and Africa for IBM and an IBM Fellow. In this role he was responsible for technical strategy, technical skills development and exploring new technology based solutions for the region. These responsibilities include the development of solutions specific for the emerging needs of the businesses and cultures in industry segments such as mobile services (banking, healthcare, education, government), natural resource management (oil, gas, mining, forest, water), cloud based business services, and security (fraud protection, risk management, privacy, cybersecurity). Dr. Dean was also vice president World Wide Strategy and Operations for IBM Research. In this role, he was responsible for setting the direction of IBM's overall Research Strategy across eight worldwide labs and leading the global operations and information systems teams. These responsibilities include management of the division's business model, research strategy, hiring, university relations, internal/external recognition, personnel development, innovation initiatives and the division's operations. Dr. Dean received a BSEE degree from the University of Tennessee in 1979, an MSEE degree from Florida Atlantic University in 1982, and a Ph.D. in Electrical Engineering from Stanford University in 1992. Dr. Dean's most recent awards include: National Institute of Science Outstanding Scientist Award, member of the American Academy of Arts and Sciences, member of the National Academy of Engineering, IEEE Fellow, Black Engineering of the Year, the University of Tennessee COE Dougherty Award, member of the National Inventor's Hall of Fame, and recipient of the Ronald H. Brown American Innovators Award.

Abstract

Establishing a culture of invention and innovation is a key in the success of most growing and competitive organizations. Awareness and context, creativity and imagination, taking risk and learning from mistakes, embracing diversity of thought, culture and disciplines, and understanding how to thrive in a globalized society will be required to be successful in the emerging world. Establishing an environment of innovation and a supporting set of policies and practices to managing intellectual capital is important for any organization wishing to be leaders in technology creation and deployment. The presentation will cover some best practices in establishing an environment of invention and innovation, managing the resulting intellectual capital and policies that will maximize the potential of that Intellectual capital to have an impact on an industry or society.