MISSOURI S&T University of Science & Technology

Distinguished Seminar Comp. Sci. & ACM CS

Cloud Computing

Dr. Sandra Johnson, IBM

Apr 5th Tuesday, 12:30 to 1:30pm

Butler-Carlton (Civil) # 120

Abstract - Driven by trends in the consumer Internet, cloud computing is a relatively new way to consume and deliver IT services. It is a utility computing model that builds on the maturation of the Web, combining rapid scalability, proliferation of the Internet, unprecedented self-service and elegant web-based applications. It allows users to execute complex computing tasks without the need to understand the underlying technology. This talk presents an overview of cloud computing, including its advantages in many environments. Also included is an overview of the technical components of a cloud computing environment, some of which include the hardware, virtual image management, resilience and automation, security and service management.

Brief Bio - Sandra K. Johnson is a Senior Technical Staff Member at IBM and is part of University Alliances with a focus on sub-Saharan Africa. Her previous assignments include working as the Chief Technology Officer, Global Small and Medium Business for IBM Systems and Technology Group, the Linux Performance Architect, and managing the Linux Performance, WebSphere Database Development, and Java Server Performance teams within IBM development and research organizations. She has conducted research in a number of computer related areas and was part of the design team that developed the prototype for the IBM Scalable Parallel Processor (SP2), the base machine for "Deep Blue", IBM's world famous chess machine.

Dr. Johnson is a member of the IBM Academy of Technology, which consists of the top 1% of IBM's over 250,000 technical professionals. She has received numerous technical and professional awards, and is a Master Inventor, with 40 patents issued and pending. She has authored and co-authored over 80 publications, is Editor-in-Chief of the book Performance Tuning for Linux Servers, and is author of Inspirational Nuggets and GREGORY: The Life of a Lupus Warrior.

Dr. Johnson earned B.S. (summa cum laude), M.S. and Ph.D. degrees, all in electrical engineering, from Southern University, Stanford University, and Rice University, respectively. She is a member of the Institute of Electrical and Electronics Engineers (IEEE), the Association for Computing Machinery (ACM) and Women in Technology International (WITI). She is also an IEEE Fellow and an ACM Distinguished Engineer.