



CENTER RESEARCH SEMINAR

Big Data: Applications and Platform Architectures

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Abstract

Big Data phenomenon is driving explosive growth in new usage models and applications to make businesses more efficient and competitive. These models and applications enable collection of the huge amounts of data, extraction of useful information through batch and real-time analytics and visualization tools to drive decision-making. A quick review of the continued growth in big data will be given with subsequent focus on some usage models and the platform architecture implications in deploying efficient computing for big data.

Biography

Fayé Briggs is an Intel Fellow and Chief Server Platform Architect for the Data Center Group. He is responsible for ensuring that Intel's multi-core and many-core-based server architectures achieve leadership in key value vectors, including performance and power-efficiency. Dr. Briggs has had a leadership role in developing multiple generations of innovative multiprocessor server and chipset designs that helped Intel gain server market segment share leadership. He conceptualized the first Intel family of scalable coherent multiprocessor platform architectures with up to 16 Itanium or Xeon processors and led the development of the chipset. Prior to joining Intel in 1997, Briggs was one of the co-architects of Sun's original SPARC processor and led a Sun architecture team on the first scalable server platform. Briggs was also a co-founder and CTO of Axil Computers, where he led the development of multiprocessor chipsets, boards and systems for more than 30 server, storage and workstation products. He also served as a tenured associate professor at Rice University and as a faculty member at Purdue University, both in electrical and computer engineering.

Dr. Briggs has published numerous technical papers on processor and multiprocessor architectures, memory ordering, cache coherence, hierarchy and performance. He is the co-author of the McGraw-Hill textbook, "Computer Architecture and Parallel Processing." Dr. Briggs received an Intel Achievement Award for the successful definition and execution of Intel's first quad-core products and holds five U.S. Patents. Briggs received his bachelor's degree in electrical engineering from Ahmadu Bello University in Nigeria, the master's degree in electrical engineering from Stanford University, and his doctorate in electrical and computer engineering from the University of Illinois, Urbana-Champaign.