

Smoky Mountains Computational Sciences and Engineering Conference

Bill Dally
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Bio:

Bill Dally is chief scientist at NVIDIA and senior vice president of NVIDIA Research, the company's world-class research organization, which is chartered with developing the strategic technologies that will help drive the company's future growth and success.

Dally first joined NVIDIA in 2009 after spending 12 years at Stanford University, where he was chairman of the computer science department and the Willard R. and Inez Kerr Bell Professor of Engineering. Dally and his Stanford team developed the system architecture, network architecture, signaling, routing and synchronization technology that is found in most large parallel computers today. Dally was previously at the Massachusetts Institute of Technology from 1986 to 1997, where he and his team built the J-Machine and M-Machine, experimental parallel computer systems that pioneered the separation of mechanism from programming models and demonstrated very low overhead synchronization and communication mechanisms. From 1983 to 1986, he was at the California Institute of Technology (Caltech), where he designed the MOSSIM Simulation Engine and the Torus Routing chip, which pioneered wormhole routing and virtual-channel flow control. Dally is a cofounder of Velio Communications and

Stream Processors. He is a member of the National Academy of Engineering, a Fellow of the American Academy of Arts & Sciences, a Fellow of the IEEE and the ACM. He received the 2010 Eckert-Mauchly Award, considered the highest prize in computer architecture, as well as the 2004 IEEE Computer Society Seymour Cray Computer Engineering Award and the 2000 ACM Maurice Wilkes Award. He has published more than 200 papers, holds more than 75 issued patents and is the author of two textbooks, "Digital Systems Engineering" and "Principles and Practices of Interconnection Networks." Dally received a bachelor's degree in electrical engineering from Virginia Tech, a master's degree in electrical engineering from Stanford University and a PhD in computer science from Caltech.