Burton Smith
Technical Fellow
Microsoft Corporation

Burton J. Smith, Technical Fellow for Microsoft Corporation, works with various groups within the company to help define and expand efforts in the areas of parallel and high performance computing. Before joining Microsoft in December 2005 he co-founded Cray Inc., formerly Tera Computer Company, where he variously served as its chief scientist, a member of the board of directors, and its chairman until 1999. Before that, Smith spent six years with Denelcor, Inc. and three years at the Institute for Defense Analyses Supercomputing Research Center.

In 2003, Smith received the Seymour Cray Award from the IEEE Computer Society and was elected to the National Academy of Engineering. He received the Eckert-Mauchly Award in 1991 given jointly by IEEE and ACM and was elected a fellow of each organization in 1994. Smith attended the University of New Mexico, where he earned a BSEE degree, and the Massachusetts Institute of Technology, where he earned SM, EE, and Sc.D degrees.

The State of Parallel Programming

Parallel programming has been more difficult than it needs to be, perhaps because its tools have been treated as an "add-on" to serial programming. The objectives of composability and productivity demand something better. This talk will describe a relatively recent consensus view about what is needed for productive parallel programming and why.