
College Park, Md. -- David A. Bader and Joseph Ja'Ja' have released a technical report entitled "SIMPLE: A Methodology for Programming High Performance Algorithms on Clusters of Symmetric Multiprocessors (SMPs)," Technical Report Number: CS-TR-3798 and UMIACS-TR-97-48. Institute for Advanced Computer Studies (UMIACS), University of Maryland, College Park, May 1997.

The report describes a methodology for developing high performance programs running on clusters of SMP nodes. The methodology is based on a small kernel (SIMPLE) of collective communication primitives that make efficient use of the hybrid shared and message passing environment. The power of the methodology is illustrated by presentation of experimental results for sorting integers, two-dimensional fast Fourier transforms (FFT), and constraint-satisfied searching. The testbed is a cluster of DEC AlphaServer 2100 4/275 nodes interconnected by an ATM switch.

This report is available in PostScript format via the following Web sites:

http://www.umiacs.umd.edu/research/EXPAR

http://www.umiacs.umd.edu/research/EXPAR/papers/3798.html

or via anonymous ftp from these locations:

ftp://ftp.cs.umd.edu/pub/papers/papers/3798/3798.ps.Z

ftp://ftp.umiacs.umd.edu/pub/EXPAR/papers/3798.ps.gz

ftp://ftp.umiacs.umd.edu/pub/EXPAR/papers/3798.ps.Z

If you prefer a hardcopy, please send your mailing address to David Bader at dbader@umiacs.umd.edu

Copyright 1997 HPCwire.