

S. LENNART JOHNSON

Publications

May 2003

Journal publications

“The GrADS Project: Software Support for High-Level Grid Application Development”, (with Francine Berman, Andrew Chien, Keith Cooper, Jack Dongarra, Ian Foster, Dennis Gannon, Ken Kennedy, Carl Kesselman, John Mellor-Crummey, Dan Reed, Linda Torczon and Rich Wolski), to appear, *Journal on Supercomputer Applications and High-Performance Computing*.

“Telescoping Languages: A Survey for Automatic Generation of Scientific Problem-Solving Systems from Annotated Libraries”, (with Ken Kennedy, Bradley Broom, Keith Cooper, Jack Dongarra, Rob Fowler, Dennis Gannon, John Mellor-Crummy and Linda Torczon), in *Journal of Parallel and Distributed Computing*, Vol. 61, No. 12, pp 1802 – 1826, 2001.

“HPFBench: A High Performance Fortran Benchmark Suite”, with Y. Charlie Hu, Guohua Jin, Dimitris Kehagias and Nadia Shalaby, in *ACM Transactions on Mathematical Software*, Vol. 26, No. 1, pp. 99 – 149, March, 2000.

“Large Scale Data Repository: Design of a Molecular Dynamics Trajectory Database”, with Michael Feig, Matin Abdullah, and Montgomery Pettitt, in *Future Generation Computer Systems*, Elsevier, North-Holland, Vol. 16, No. 1, pp. 101 – 110, 1999.

“Local Basic Linear Algebra Subroutines (LAPACK) for the CM-5/5E”, (with David Kramer and Yu Hu), in the *International Journal of Supercomputer Applications*, Vol. 10, No. 4, pp. 300 – 335, 1996.

“A Data Parallel Implementation of Hierarchical N -body Methods”, (with Yu Hu), in the *International Journal of Supercomputer Applications*, Vol. 10, No. 1, pp. 3 – 40, 1996.

“Implementing $O(N)$ N -body algorithms efficiently in data parallel languages”, (with Yu Hu), in the *Journal of Scientific Programming*, Vol. 5, No. 4, pp. 337 – 364, 1996.

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“Multiplication of Matrices of Arbitrary Shape on a Data Parallel Computer”, (with Kapil K. Mathur), in *Journal of Parallel Computing*, Vol. 20, No. 7, pp. 919 - 951, July, 1994.

“An Efficient Communication Strategy for Finite Element Methods on the Connection Machine CM-5 System”, (with Zdenek Johan, Kapil K Mathur, and Thomas J.R. Hughes), in *Computer Methods in Applied Mechanics and Engineering*, vol. 113, pages 363 – 387, 1994.

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¹ Chosen for the 1986 ICPP Outstanding Paper Award

² Nominated for Outstanding Paper Award

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