

David Nassimi

April 2004

Journal Publications (All Refereed)

1. D. Nassimi, "Parallel Algorithms for PM2B-ASCEND Computations on a SIMD Hypercube Using Multiple Levels of Iteration-Grouping," *Journal of Parallel and Distributed Computing*, under revision.
2. R. Becker, D. Nassimi, and Y. Perl, "The New Class of g-Chain Periodic Sorters," *Journal of Parallel and Distributed Computing*, Vol. 54, No. 2, Nov. 1998, pp. 206-222.
3. D. Nassimi, "Nearly Logarithmic-Time Parallel Algorithms for the Class of $\pm 2^b$ ASCEND Computations on a SIMD Hypercube," *Journal of Parallel and Distributed Computing*, vol. 20, no. 3, March 1994, pp. 289-302.
4. D. Nassimi, "Parallel Algorithms for the Classes of $\pm 2^b$ DESCEND and ASCEND Computations on a SIMD Hypercube," *IEEE Transactions on Parallel and Distributed Systems*, vol. 4, no. 12, Dec. 1993, pp. 1372-1381.
5. D. Nassimi and Y.D. Tsai, "An Efficient Implementation of Batcher's Odd-Even Merge on a SIMD Hypercube," *Journal of Parallel and Distributed Computing*, vol. 19, no. 1, Sep. 1993, pp. 58-63.
6. M. Misra, D. Nassimi, and V.K. Prasanna, "Efficient VLSI Implementation of Iterative Solutions to Sparse Linear Systems," *Parallel Computing*, vol. 19, No. 5, May 1993, pp. 525-544.
7. D. Nassimi and S. Sahni, "Parallel Permutation and Sorting Algorithms and a New Generalized Connection Network," *Journal of the ACM*, vol. 29, no. 3, July 1982, pp. 642-667.
8. D. Nassimi and S. Sahni, "Optimal BPC Permutations on a Cube-Connected SIMD Computer," *IEEE Transactions on Computers*, vol. C-31, no. 4, April 1982, pp. 338-341.
9. D. Nassimi and S. Sahni, "Parallel Algorithms to Set-up the Benes Permutation Network," *IEEE Transactions on Computers*, vol. C-31, no. 2, Feb. 1982, pp. 148-154.
10. E. Dekel, D. Nassimi, and S. Sahni, "Parallel Matrix and Graph Algorithms," *SIAM Journal on Computing*, vol. 10, no. 4, Nov. 1981, pp. 657-675.
11. D. Nassimi and S. Sahni, "A Self-Routing Benes Network and Parallel Permutation Algorithms," *IEEE Transactions on Computers*, vol. C-30, no. 5, May 1981, pp. 332-340.
12. D. Nassimi and S. Sahni, "Data Broadcasting in SIMD Computers," *IEEE Transactions on Computers*, vol. C-30, no. 2, Feb. 1981, pp. 101-107.

13. D. Nassimi and S. Sahni, "Finding Connected Components and Connected Ones on a Mesh-Connected Parallel Computer," *SIAM Journal on Computing*, vol. 9, no. 4, Nov. 1980, pp. 744-757.
14. D. Nassimi and S. Sahni, "An Optimal Routing Algorithm for Mesh-Connected Parallel Computers," *Journal of the ACM*, vol. 27, no. 1, Jan. 1980, pp. 6-29.
15. D. Nassimi and S. Sahni, "Bitonic Sort on a Mesh-Connected Parallel Computer," *IEEE Transactions on Computers*, vol. C-28, no. 1, Jan. 1979, pp. 2-6.

Conference Publications (All Refereed)

16. D. Nassimi, J. Milind, and A. Sohn, "A Hash-Based Scalable Technique for Parallel Bidirectional Search," IEEE Symposium on Parallel and Distributed Processing (SPDP'95), Oct. 1995, pp. 414-421.
17. D. Nassimi, Y. Perl, and R. Becker, "The Generalized Class of g-Chain Periodic Sorting Networks," *The 8th International Parallel Processing Symposium (IPPS'94)*, Cancun, Mexico, IEEE Computer Society, April 1994, pp. 424-432.
18. R. Becker, D. Nassimi, and Y. Perl, "The New Class of g-Chain Periodic Sorters," *The 5th Annual ACM Symposium on Parallel Algorithms and Architectures*, June 1993, Velen, Germany, pp. 356-364.
19. D. Nassimi, "A Parallel MSF Algorithm for Planar Graphs on a Mesh and Applications to Image Processing," *Proceedings of the 7th International Parallel Processing Symposium*, IEEE Computer Society, April 1993, pp. 205-211.
20. D. Nassimi, "Parallel Algorithms for PM2B-ASCEND Computations on a SIMD Hypercube Using Multiple Levels of Iteration-Grouping," *Proceedings of 1992 International Conference on Parallel Processing*, Sponsored by Penn State University, Aug. 1992, Vol. III, pp. 221-228.
21. D. Nassimi, "Nearly Logarithmic-Time Parallel Algorithms for the Class of $\pm 2^b$ ASCEND Computations on a SIMD Hypercube," *Proceedings of the 6th International Parallel Processing Symposium*, IEEE Computer Society, March 1992, pp. 122-129.
22. M.R. Hakami, P.J. Warter, C.G. Boncelet, D. Nassimi, "VLSI Architectures for Recursive and Multiple-Window Order Statistic Filtering," *Proceedings of the 6th International Parallel Processing Symposium*, IEEE Computer Society, March 1992, pp. 294-297.
23. D. Nassimi, "A Parallel Algorithm for the Class of $\pm 2^b$ ASCEND Computations on a SIMD Hypercube," *Proc. Twenty-Ninth Annual Allerton Conference on Communication, Control, and Computing*, University of Illinois, Oct. 1991, pp. 845-846.
24. D. Nassimi and Y.D. Tsai, "Efficient Implementations of a Class of $\pm 2^b$ Parallel Computations on a SIMD Hypercube," in *Proceedings of the 5th International Parallel Processing Symposium*, IEEE Computer Society, April 1991, pp. 2-9.

25. D. Nassimi, "A Fault-Tolerant Routing Algorithm for BPC Permutations on Multi-stage Interconnection Networks," *Proceedings of the 1989 International Conference on Parallel Processing*, Sponsored by Penn State University, Vol. 1, Aug. 1989, pp. 278-287.
26. D. Nassimi and S. Sahni, "Data Broadcasting in SIMD Computers," *Proceedings of the 1980 International Conference on Parallel Processing*, IEEE Computer Society, Aug. 1980, pp. 325-326.
27. D. Nassimi and S. Sahni, "A Self-Routing Benes Network and Parallel Permutation Algorithms," *Proceedings of the 7th International Symposium on Computer Architecture*, Cosponsored by IEEE Computer Society and ACM, France, May 1980, pp. 190-195.
28. D. Nassimi and S. Sahni, "Parallel Algorithms to Set-up the Benes Permutation Network," *Proceedings of Workshop on Interconnection Networks for Parallel and Distributed Processing*, Cosponsored by ACM SIGARCH and IEEE Computer Society, Purdue University, April 1980, pp. 70-71.
29. E. Dekel, D. Nassimi, and S. Sahni, "Parallel Matrix and Graph Algorithms," *Proceedings of 17th Annual Allerton Conference on Communication, Control, and Computing*, University of Illinois, Oct. 1979, pp. 27-36.
30. D. Nassimi and S. Sahni, "Parallel Permutation and Sorting Algorithms," *Proceedings of 17th Annual Allerton Conference on Communication, Control, and Computing*, University of Illinois, Oct. 1979, pp. 1-10.

Book Articles

31. D. Nassimi and S. Sahni, "Parallel Permutation and Sorting Algorithms and a New Generalized Connection Network," in *Interconnection Networks for Parallel and Distributed Processing*, edited by C.L. Wu and T.Y. Feng, IEEE Computer Society Press, 1984, pp. 217-240.
32. D. Nassimi and S. Sahni, "A Self-Routing Benes Network and Parallel Permutation Algorithms," in *Interconnection Networks for Parallel and Distributed Processing*, edited by C.L. Wu and T.Y. Feng, IEEE Computer Society Press, 1984, pp. 241-249.
33. D. Nassimi and S. Sahni, "Data Broadcasting in SIMD Computers," in *Interconnection Networks for Parallel and Distributed Processing*, edited by C.L. Wu and T.Y. Feng, IEEE Computer Society Press, 1984, pp. 282-288.
34. E. Dekel, D. Nassimi, and S. Sahni, "Parallel Matrix and Graph Algorithms," in *Supercomputers: Design and Applications*, edited by Kai Hwang, IEEE Computer Society Press, 1984, pp. 387-403.