

Publications

1. Refereed Journal Publications

- [J41] A. T. Chronopoulos, M. Musku, S. Penmatsa and D. Popescu, Spectrum Load Balancing for Medium Access in Cognitive Radio Systems, *IEEE Communication Letters*, Vol. 12, No. 5, pp. 353-355, 2008.
- [J40] F. M. Ciorba, T. Andronikos, I. Riakiotakis, G. Papakonstantinou, A. T. Chronopoulos, *Enhancing Self-Scheduling Algorithms via Synchronization and Weighting*, *Journal of Parallel and Distributed Computing*, Vol. 68, No. 2, pp. 246-264, 2008.
- [J39] D. Grosu, A.T. Chronopoulos, *A Truthful Load Balancing Mechanism with Verification*, *Parallel Processing Letters*, Vol. 16, No. 1, pp. 3-17, 2006.
- [J38] R. Andonie, A. T. Chronopoulos, D. Grosu, H. Galmeanu, *An Efficient Concurrent Implementation of a Neural Network Algorithm*, *Concurrency and Computation: Practice and Experience* Volume 18, Issue 12, pp. 1559-1573, 2006.
- [J37] A. T. Chronopoulos, S. Penmatsa, Jianhua Xu, S. Ali, *Distributed Loop Scheduling Schemes for Heterogeneous Computer Systems*, *Concurrency and Computation: Practice and Experience*, Volume 18, Issue 7, pp. 771-785, June 2006.
- [J36] A. T. Chronopoulos, S. Penmatsa, N. Yu, D. Yu, *Scalable Loop Scheduling Schemes for Heterogeneous Clusters*, *International Journal of Computational Science and Engineering*, Vol. 1, No. 2/3/4, pp. 110-117, 2005.
- [J35] D. Grosu, A.T. Chronopoulos, *Noncooperative Load Balancing in Distributed Systems*, *Journal of Parallel and Distributed Computing*, Volume 65, Issue 9, pp. 1022-1034, September 2005.
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- [J32] Anthony T. Chronopoulos, Caimu Tang, Ece Yaprak, *An Efficient ATM Network Switch Scheduling*, IEEE Transactions on Broadcasting, Volume: 49 Issue: 3, pp. 278 -292, Sept. 2003.
- [J31] Anthony T. Chronopoulos, D. Grosu, A. M. Wissink, M. Benche and J. Liu, *An Efficient 3D Grid Based Scheduling for Heterogeneous Systems* , Journal of Parallel and Distributed Computing, Vol 63/9, pp. 827-837, 2003.
- [J30] A. T. Chronopoulos, C. M. Johnston, *A Real-Time Traffic Simulation Using a Communication Latency Hiding Parallelization*, IEEE Transactions on Vehicular Technology, Volume 51, No. 3, pp. 498-510, May 2002.
- [J29] A. Chronopoulos and D. Kincaid, *On the Odir iterative method for nonsymmetric indefinite linear systems*, Numerical Linear Algebra with Applications, Vol.8, pp.71-82, 2001.
- [J28] S. Ziavras, H. Grebel and A. T. Chronopoulos, and F. Marcelli, *A new-generation parallel computer and its performance evaluation*, Future Generation Computer Systems, 17, pp. 315-333, 2000.
- [J27] E. Yaprak, Y. Xiao, A. T. Chronopoulos, E. Chow, L. Anneberg, *Buffer Management Simulation in ATM Networks* , The International Journal of Modelling and Simulation, Vol. 20, No. 2, pp. 146-152, 2000.
- [J26] E. Yaprak, A. T. Chronopoulos, K. Psarris, Y. Xiao, *Dynamic buffer allocation in an ATM network*, Computer Networks, 31, pp. 1927-1933, 1999.
- [J25] A. M. Wissink, A. S. Lyrintzis and A. T. Chronopoulos, *A Parallel Newton-Krylov Method for Rotary-wing Flowfield Calculations* , AIAA Journal, Vol. 37, No. 10, pp. 1213-1221, Oct. 1999.
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- [J21] D. Papadopoulos, C. Siettos, A.G. Boudouvis and A. T. Chronopoulos, *Stability Analysis of Magneto-hydrostatic Equilibria by the Finite Element Method and Arnoldi and Lanczos Eigensolvers*, Advances in Engineering Software, Volume 27, No. 1/2, pp. 145-153, 1996.
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- [J19] A. T. Chronopoulos and C. D. Swanson, *Parallel Iterative S-step Methods for Unsymmetric Linear Systems*, Parallel Computing. Volume 22/5, pp. 623-641, 1996.
- [J18] A. T. Chronopoulos, *On the Squared Unsymmetric Lanczos Method*, Journal of Computational and Applied Mathematics, Volume 54, No. 1, pp. 65-78, 1994.
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- [J16] H. Dong, A. T. Chronopoulos, J. Zou and A. Gopinath, *Vectorial Integrated Finite-Difference Analysis of Dielectric Waveguides*, IEEE Journal of Lightwave Technology, Volume 11, No. 10, pp. 1559-1564, 1993.
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- [J6] A. T. Chronopoulos, C. R. Swaminathan, and V. R. Voller, *The Stefan Problem Solved via Conjugate Gradient like Iterative Methods on a Parallel Vector Machine*, The International Journal on Supercomputing, Volume 5, No. 3, pp. 74-91, 1991.
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- [J1] A. T. Chronopoulos and C. W. Gear, *S-step Iterative Methods for Symmetric Linear Systems*, Journal of Computational and Applied Mathematics, Volume 25, pp. 153-168, 1989.

2. ACM/IEEE Refereed Conference Publications

- [C40] I. Riakiotakis, G. Papakonstantinou and A. T. Chronopoulos, *Implementation of Dynamic Loop Scheduling in Reconfigurable Platforms*, Proceedings of the 3rd IEEE International Symposium on Industrial Embedded Systems (SIES'2008), Montpellier (France), June 11-13, 2008.

- [C39] F. M. Ciorba, T. Andronikos, I. Riakiotakis, G. Papakonstantinou, A. T. Chronopoulos, *Studying the impact of synchronization frequency on scheduling tasks with dependencies in heterogeneous systems*, Proceedings of the IEEE/ACM 16th International Conference on Parallel Architecture and Compilation Techniques, pp. 403 - 403, 15-19 Sept. 2007, Brashov, Romania.
- [C38] K. Kyriakopoulos, A. T. Chronopoulos and L. Ni, *An Optimal Scheduling Scheme for Tiling in Distributed Systems*, Proceedings of the IEEE International Conference on Cluster Computing, pp. 267-274, Austin, Texas, USA, September 17-20 2007.
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- [C36] T. Andronikos, M. Ciorba, I. Riakiotakis, A. T. Chronopoulos and G. Papakonstantinou, *Optimal Synchronization Frequency for Dynamic Pipelined Computations on Heterogeneous Systems*, Proceedings of the IEEE International Conference on Cluster Computing, pp. 241- 248, Austin, Texas, USA, September 17-20 2007.
- [C35] M. Musku, A. T. Chronopoulos, S. Penmatsa and D. Popescu, *A Game Theoretic Approach of Open Spectrum in Cognitive Radios*, Proceedings of the Second IEEE International Conference on Cognitive Radio (CrownCom 2007), Orlando, Florida, USA, July 31 - August 3, 2007.
- [C34] S. Penmatsa, A. T. Chronopoulos, N. T. Karonis and B. Toonen, *Implementation of Distributed Loop Scheduling Schemes on the TeraGrid*, Proceedings of the 21st IEEE International Parallel and Distributed Processing Symposium (IPDPS 2007), 4th High-Performance Grid Computing Workshop, Long Beach, California, USA, March 26-30, 2007.
- [C33] S. Penmatsa and A. T. Chronopoulos. *Dynamic Multi-User Load Balancing in Distributed Systems*, Proceedings of the 21st IEEE International Parallel and Distributed Processing Symposium (IPDPS 2007), Long Beach, California, USA, March 26-30, 2007.
- [C32] C. Tang, A. T. Chronopoulos and P. Cotae, *An Iterative Power Allocation Scheme for Spread Spectrum Wireless Systems*, Proceedings of IEEE International Symposium on Wireless Pervasive Computing, pp. 600-605, Puerto Rico, 5-7 February, 2007.

- [C31] S. Penmatsa and A. T. Chronopoulos, *Price-based User-optimal Job Allocation Scheme for Grid Systems*, Proceedings of IEEE IPDPS 2006, The 20th IEEE International Parallel & Distributed Processing Symposium, Rhodes, Greece, 25-29 April 2006.
- [C30] S. Penmatsa and A. T. Chronopoulos, *Cooperative Load Balancing for a Network of Heterogeneous Computers* Proceedings of IEEE IPDPS 2006, The 20th IEEE International Parallel & Distributed Processing Symposium, Rhodes, Greece, 25-29 April 2006.
- [C29] F. M. Ciorba, T. Andronikos, I. Riakiotakis, A. T. Chronopoulos, G. Papakonstantinou, *Dynamic Multi Phase Scheduling for Heterogeneous Clusters*, Proceedings of IEEE IPDPS 2006, The 20th IEEE International Parallel & Distributed Processing Symposium, Rhodes, Greece, 25-29 April 2006.
- [C28] M. Musku, A. T. Chronopoulos, D. Popescu, *Joint Rate and Power Control Using Game Theory*, Proceedings of IEEE CCNC 2006, 3rd IEEE Consumer Communications and Networking Conference, pp. 1258 - 1262, Las Vegas NV, 8-10 January 2006.
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- [C25] M. Musku, A. T. Chronopoulos, D. Popescu, *A Simulation Comparison of Distributed Power Control Algorithms for Wireless Communications*, Proceedings of IEEE ISSCS, The International Symposium on Signals, Circuits, and Systems, pp. 263-268, Iasi, Romania, July 2005.
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- [OC16] A. T. Chronopoulos, S. Ponipireddy, J. Sarangapani, *Constructing Energy-Efficient Broadcast Trees in Wireless Ad Hoc Networks*, Proceedings of the IEEE (sponsored) International Symposium on Parallel and Distributed Computing, pp. 205-213, Iasi, Romania, 17-20 July, 2002.
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- [OC13] R. Andonie, A. T. Chronopoulos, D. Grosu, H. Galmeanu, *Distributed backpropagation neural networks on a PVM Heterogeneous System*, Proceedings of the 10th IASTED International Conference on Parallel and Distributed Computing Systems, pp. 555-560, Las Vegas, Nevada, 23-31 October, 1998.
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4. Published Research Reports

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