

PUBLICATIONS

Papers can be accessed by clicking on the link under the title of the paper.

Papers with no access link can be accessed at ResearchGate.

https://www.researchgate.net/profile/A_Chronopoulos/contributions

Please cite these papers in your future related publications (or Students' Thesis/Dissertations).

Non-co-author citations of these papers (over 2100 and h-index=29) are listed at the web-page:

(www.cs.utsa.edu/faculty/atc/citelist.pdf

www.cs.utsa.edu/faculty/atc/h_index.pdf)

(*) papers on HPC communication avoiding iterative methods for sparse linear problems.

(**) papers on game theory based load balancing.

Publications

Refereed Journal Publications

[J70] A. Kalantari A. Kamsin, S. Shamshirband, A. Gani, H. Alinejad-Rokny, A. T. Chronopoulos, *Computational Intelligence Approaches for Classification of Medical Data: State-of-the-art, Future Challenges and Research Directions*, Neurocomputing, Elsevier (Online 19 Sept 2017).

<https://doi.org/10.1016/j.neucom.2017.01.126>

[J69] H. Xiao, Z. Zhang, A. T. Chronopoulos, *Performance Analysis of Multi-Source Multi-Destination Cooperative Vehicular Networks with Hybrid Decode-Amplify-Forward Cooperative Relaying Protocol*, IEEE Trans. Intelligent Transp. Systems (Online 22 Nov. 2017)

<https://doi.org/10.1109/TITS.2017.2766267>

[J68] M Faiz, N B Anuar, A W A Wahab, S Shamshirband, A T Chronopoulos, *Source Camera Identification: A Distributed Computing Approach Using Hadoop*, Journal of Cloud Computing 6(1)18 , 2017

<https://doi.org/10.1186/s13677-017-0088-x>

[J67] Xiao, H., Zhang, Z., Chronopoulos, A. T. *New construction of quantum error-avoiding codes via group representation of quantum stabilizer codes. The European Physical Journal C*, 77: 667, 2017.

<https://doi.org/10.1140/epjc/s10052-017-5246-2>

[J66] B. Jan, F. G. Khan, B. Montrucchio, A. T. Chronopoulos, S. Shamshirband, A. N. Khan, *Introducing ToPe-FFT; an OpenCL based FFT Library targeting GPUs*, Concurrency and Computation: Practice and Experience, Vol 29, 21, 10 Nov 2017.

<https://doi.org/10.1002/cpe.4256>

[J65] Yusoff, Z., Kamsin, A., Shamshirband, S. and Chronopoulos, A.T., *A survey of educational games as interaction design tools for affective learning: Thematic analysis taxonomy*, Education and Information Technologies, 1-26

<https://doi.org/10.1007/s10639-017-9610-5> First Online: 15 May 2017.

[J64] Khan, S., Nazir, B., Khan, I. A., Shashirband, S., & Chronopoulos, A. T. *Load Balancing in Grid Computing: Taxonomy, Trends and Opportunities*. Journal of Network and Computer Applications. Vol 88, pp. 99-111, 15 June 2017.

<https://doi.org/10.1016/j.jnca.2017.02.013>

[J63] Khan, A. N., Ali, M., Khan, F. G., Khan, I. A., Jadoon, W., Shamshirband, S., Chronopoulos, A. T. *A comparative study and workload distribution model for re-encryption schemes in a mobile cloud computing environment*. International Journal of Communication Systems. DOI: 10.1002/dac.3308 First Online: 22 March, 2017 Wiley

<https://doi.org/10.1002/dac.3308>

[J62] S. Agaian, M. Madhukar, A. T. Chronopoulos, *A New Acute Leukemia Automated Classification System*, Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization,

<http://dx.doi.org/10.1080/21681163.2016.1234948> First Online: 7 Dec 2016.

[J61] Tripathi, R., Vignesh, S., Tamarapalli, V., Chronopoulos, A.T. and Siar, H., *Non-cooperative power and latency aware load balancing in distributed data centers*, Journal of Parallel and Distributed Computing, 107, pp.76-86, 2017.

<https://doi.org/10.1016/j.jpdc.2017.04.006>

[J60] Han, Y., & Chronopoulos, A. T. , *Scalable Loop Self-Scheduling Schemes for Large-Scale Clusters and Cloud Systems*, International Journal of Parallel Programming, 45:595–611, June 1, 2017.

<https://doi.org/10.1007/s10766-016-0434-5>

- [J59] F G Khan, B Montrucchio, B Jan, A N Khan, W Jadoon, S Shamsirband, A. T. Chronopoulos, I A Khan, *An Optimized Magnetostatic Field Solver on GPU Using Open Computing Language*, *Concurrency and Computation: Practice and Experience*, 29(5), March 10, 2017.
<https://doi.org/10.1002/cpe.3981>
- [J58] H. Siar, K. Kourosh, A. T. Chronopoulos, *A Combination of Game Theory and Genetic Algorithm for Load Balancing in Distributed Computer Systems*, *Int. J. Advanced Intelligence Paradigms*, 9(1), pp. 82-95, 2017.
<https://doi.org/10.1504/IJAIP.2017.081181>
- [J57] R Ranjan, Y Feng, A Chronopoulos, *Augmented Stabilized and Galerkin Least Squares Formulations*, *Journal of Mathematics Research*, 8(6), December 2016.
<http://dx.doi.org/10.5539/jmr.v8n6p1>
- [J56] H. Zareamoghaddam , A.T. Chronopoulos, M. Nouri Kadijani, Z. Zareamoghaddam, *Uzawa Algorithms for Fully Fuzzy Linear Systems*, *International Journal of Computational Intelligence Systems*, 9(5) , 971-983, 2016.
<https://doi.org/10.1080/18756891.2016.1237194>
- [J55] R Ranjan, A Chronopoulos, Y Feng, *Computational Algorithms for Solving Spectral/h Stabilized Incompressible Flow Problems*, *Journal of Mathematics Research*, 8(4), 21-39, Aug 2016.
<http://dx.doi.org/10.5539/jmr.v8n4p21>
- [J54] S. Stathakis, F. Balbi, A. T. Chronopoulos, N. Papanikolaou, *Monte Carlo modeling of linear accelerator using distributed computing*, (*Journal of Balkan Union of Oncology*) , JBUON, 21(1), 252-260, Jan.-Feb. 2016.
<https://www.jbuon.com/pdfs/JBUON-21-1-33.pdf>
- [J53] H. Siar, K. Kourosh, A. T. Chronopoulos, *An effective game theoretic static load balancing applied to distributed computing*, *Cluster Computing*, Vol 18, 4, pp. 1609-1623, Dec 2015.
<https://doi.org/10.1007/s10586-015-0486-0>
<http://www.cs.utsa.edu/~atc/pub/J53.pdf>
- [J52] M. Meshabi, A. M. Rahmani, A. T. Chronopoulos, *Data Placement using Dewey Encoding in a Hierarchical Data Grid*, *Journal of Network and Computer Applications*, vol. 49, March 2015, pp. 88-98, 2014, Elsevier.
<https://doi.org/10.1016/j.jnca.2014.11.009>
<http://www.cs.utsa.edu/~atc/pub/J52.pdf>
- [J51] S. Agaian, M. Madhukar, A. T. Chronopoulos, *Automated Screening System for Acute Myelogenous Leukemia Detection in Blood Microscopic Images*, *IEEE Systems Journal*, vol. 8, no. 3, pp. 995–1004, 2014.
<https://doi.org/10.1109/JSYST.2014.2308452>
<http://www.cs.utsa.edu/~atc/pub/J51.pdf>
- [J50]** S. Penmatsa, A. T. Chronopoulos, *Cost minimization in utility computing systems*, *Concurrency and Computation: Practice and Experience*, Wiley, Vol. 16, Issue 1, pp. 287-307, 2014.
<https://doi.org/10.1002/cpe.2984>
<http://www.cs.utsa.edu/~atc/pub/J50.pdf>
- [J49] I. Riakiotakis, F. M. Ciorba, T. Andronikos, G. Papakonstantinou, A. T. Chronopoulos, *Towards the optimal synchronization granularity for dynamic scheduling of pipelined computations on heterogeneous computing systems*, *Concurrency and Computation: Practice and Experience*, Wiley, Vol. 24, Issue 18, pp. 2302-2327, 2012.
<https://doi.org/10.1002/cpe.2812>
<http://www.cs.utsa.edu/~atc/pub/J49.pdf>
- [J48]** S. Penmatsa, A. T. Chronopoulos, *Game-theoretic static load balancing for distributed systems*, *Journal of Parallel and Distributed Computing*, Vol. 71, Issue 4, pp. 537-555, 2011.
<https://doi.org/10.1016/j.jpdc.2010.11.016>
<http://www.cs.utsa.edu/~atc/pub/J48.pdf>
- [J47] A. Bassias, A. T. Chronopoulos, *Statistical Performance Analysis of the MUSIC Algorithm in Angular Sectors*, *Journal of Signal Processing*, Vol.15, No.1, pp. 37-46, 2011.
<http://ci.nii.ac.jp/naid/40018702235>
<http://www.cs.utsa.edu/~atc/pub/J47.pdf>
- [J46] T. Andronikos, F. M. Ciorba, I. Riakiotakis, G. Papakonstantinou, A. T. Chronopoulos, *Studying the impact of synchronization frequency on scheduling tasks with dependencies in heterogeneous systems*, *Performance Evaluation*, Vol. 67, Issue 12, pp. 1324-1339, 2010.

<https://doi.org/10.1016/j.peva.2010.08.020>
<http://www.cs.utsa.edu/~atc/pub/J46.pdf>
 [J45] M. Musku, A. T. Chronopoulos, D. Popescu, A. Stefanescu, *A game-theoretic approach to joint rate and power control for uplink CDMA communications*, IEEE Transactions on Communications, Vol. 58, Issue 3, pp. 923-932, 2010.

<https://doi.org/10.1109/TCOMM.2010.03.070205>
<http://www.cs.utsa.edu/~atc/pub/J45.pdf>
 [J44]* A. T. Chronopoulos, A. Kucherov, *Block s-step Krylov iterative methods*, Numerical Linear Algebra with Applications, Vol. 17, Issue 1, pp. 3-15, 2010.

<https://doi.org/10.1002/nla.643>
<http://www.cs.utsa.edu/~atc/pub/J44.pdf>
 [J43] C. Tang, D. O. Wu, A. T. Chronopoulos, C.S. Raghavendra, *Efficient multi-party digital signature using adaptive secret sharing for low-power devices in wireless networks*, IEEE Transactions on Wireless Communications, Vol. 8, Issue 2, pp. 882-889, 2009.

<https://doi.org/10.1109/TWC.2008.071286>
<http://www.cs.utsa.edu/~atc/pub/J43.pdf>
 [J42] A. M. Castaldo, R. C. Whaley, A. T. Chronopoulos, *Reducing Floating Point Error in Dot Product using the Superblock Family of Algorithms*, SIAM J. Scientific Computing, Vol. 31, Issue 2, pp. 1156-1174, 2008.

<https://doi.org/10.1137/070679946>
<http://www.cs.utsa.edu/~atc/pub/J42.pdf>
 [J41]** D. Grosu, A.T. Chronopoulos, M. Y. Leung, *Cooperative load balancing in distributed systems*, Concurrency and Computation-Practice and Experience, Vol. 20, Issue 16, pp. 1953-1976, 2008.

<https://doi.org/10.1002/cpe.1331>
<http://www.cs.utsa.edu/~atc/pub/J41.pdf>
 [J40] A. T. Chronopoulos, M. Musku, S. Penmatsa, D. Popescu, *Spectrum Load Balancing for Medium Access in Cognitive Radio Systems*, IEEE Communication Letters, Vol. 12, Issue 5, pp. 353-355, 2008.

<https://doi.org/10.1109/LCOMM.2008.071968>
<http://www.cs.utsa.edu/~atc/pub/J40.pdf>
 [J39] 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, Issue 2, pp. 246-264, 2008.

<https://doi.org/10.1016/j.jpdc.2007.07.003>
<http://www.cs.utsa.edu/~atc/pub/J39.pdf>
 [J38]** D. Grosu, A.T. Chronopoulos, *A Truthful Load Balancing Mechanism with Verification*, Parallel Processing Letters, Vol. 16, Issue 1, pp. 3-17, 2006.

<https://doi.org/10.1142/S0129626406002435>
<http://www.cs.utsa.edu/~atc/pub/J38.pdf>
 [J37] R. Andonie, A. T. Chronopoulos, D. Grosu, H. Galmeanu, *An efficient concurrent implementation of a neural network algorithm*, Concurrency and Computation-Practice and Experience, Vol. 18, Issue 12, pp. 1559-1573, 2006.

<https://doi.org/10.1002/cpe.987>
<http://www.cs.utsa.edu/~atc/pub/J37.pdf>
 [J36] A. T. Chronopoulos, S. Penmatsa, Jianhua Xu, S. Ali, *Distributed loop-scheduling schemes for heterogeneous computer systems*, Concurrency and Computation-Practice and Experience, Vol. 18, Issue 7, pp. 771-785, 2006.

<https://doi.org/10.1002/cpe.960>
<http://www.cs.utsa.edu/~atc/pub/J36.pdf>
 [J35] A. T. Chronopoulos, S. Penmatsa, N. Yu, D. Yu, *Scalable loop self-scheduling schemes for heterogeneous clusters*, International Journal of Computational Science and Engineering, Vol. 1, No. 2/3/4, pp. 110-117, 2005.

<https://doi.org/10.1504/IJCSE.2005.009696>
<http://www.cs.utsa.edu/~atc/pub/J35.pdf>
 [J34]** D. Grosu, A.T. Chronopoulos, *Noncooperative load balancing in distributed systems*, Journal of Parallel and Distributed Computing, Vol. 65, Issue 9, pp. 1022-1034, 2005.

<https://doi.org/10.1016/j.jpdc.2005.05.001>
<http://www.cs.utsa.edu/~atc/pub/J34.pdf>

- [J33] C. Tang, A. T. Chronopoulos, E. Yaprak, *An efficient network-switch scheduling for real-time applications*, IEEE Transactions on Communications, Vol. 53, Issue 3, pp. 401-407, 2005.
<https://doi.org/10.1109/TCOMM.2005.843434>
<http://www.cs.utsa.edu/~atc/pub/J33.pdf>
- [J32]** D. Grosu, A.T. Chronopoulos, *Algorithmic mechanism design for load balancing in distributed systems*, IEEE Transactions on Systems, Man and Cybernetics - Part B, Vol. 34, Issue 1, pp. 77-84, 2004.
<https://doi.org/10.1109/TSMCB.2002.805812>
<http://www.cs.utsa.edu/~atc/pub/J32.pdf>
- [J31] Anthony T. Chronopoulos, Caimu Tang, Ece Yaprak, *An efficient ATM network switch scheduling*, IEEE Transactions on Broadcasting, Vol. 49, Issue 3, pp. 278 -292, 2003.
<https://doi.org/10.1109/TBC.2003.817079>
<http://www.cs.utsa.edu/~atc/pub/J31.pdf>
- [J30] Anthony T. Chronopoulos, D. Grosu, A. M. Wissink, M. Benche, J. Liu, *An efficient 3D grid based scheduling for heterogeneous systems*, Journal of Parallel and Distributed Computing, Vol. 63, Issue 9, pp. 827-837, 2003.
[https://doi.org/10.1016/S0743-7315\(03\)00112-6](https://doi.org/10.1016/S0743-7315(03)00112-6)
<http://www.cs.utsa.edu/~atc/pub/J30.pdf>
- [J29] A. T. Chronopoulos, C. M. Johnston, *A real-time traffic simulation using a communication latency hiding parallelization*, IEEE Transactions on Vehicular Technology, Vol. 51, Issue 3, pp. 498-510, 2002.
[http://doi.org/10.1016/S0743-7315\(03\)00112-6](http://doi.org/10.1016/S0743-7315(03)00112-6)
<http://www.cs.utsa.edu/~atc/pub/J29.pdf>
- [J28] A. Chronopoulos, D. Kincaid, *On the Odir iterative method for non-symmetric indefinite linear systems*, Numerical Linear Algebra with Applications, Vol. 8, Issue 2, pp.71-82, 2001.
[https://doi.org/10.1002/1099-1506\(200103\)8:2<71::AID-NLA230>3.0.CO;2-6](https://doi.org/10.1002/1099-1506(200103)8:2<71::AID-NLA230>3.0.CO;2-6)
<http://www.cs.utsa.edu/~atc/pub/J28.pdf>
- [J27] S. Ziavras, H. Grebel, A. T. Chronopoulos, F. Marcelli, *A new-generation parallel computer and its performance evaluation*, Future Generation Computer Systems, Vol. 17, Issue 3, pp. 315-333, 2000.
[https://doi.org/10.1016/S0167-739X\(00\)00082-0](https://doi.org/10.1016/S0167-739X(00)00082-0)
<http://www.cs.utsa.edu/~atc/pub/J27.pdf>
- [J26] E. Yaprak, Y. Xiao, A. T. Chronopoulos, E. Chow, L. Anneberg, *Buffer Management Simulation in ATM Networks*, The International Journal of Modeling and Simulation, Vol. 20, Issue 2, pp. 146-152, 2000.
<https://doi.org/10.1080/02286203.2000.11442151>
<http://www.cs.utsa.edu/~atc/pub/J26.pdf>
- [J25] E. Yaprak, A. T. Chronopoulos, K. Psarris, Y. Xiao, *Dynamic buffer allocation in an ATM Switch*, Computer Networks, Vol. 31, Issue 18, pp. 1927-1933, 1999.
[https://doi.org/10.1016/S1389-1286\(99\)00004-3](https://doi.org/10.1016/S1389-1286(99)00004-3)
<http://www.cs.utsa.edu/~atc/pub/J25.pdf>
- [J24] A. M. Wissink, A. S. Lyrantzis, A. T. Chronopoulos, *Parallel Newton-Krylov Method for Rotary-wing Flowfield Calculations*, AIAA Journal, Vol. 37, Issue 10, pp. 1213-1221, 1999. DOI: 10.1109/25.661057
<https://doi.org/10.2514/2.615>
<http://www.cs.utsa.edu/~atc/pub/J24.pdf>
- [J23] A. T. Chronopoulos, C. Johnston, *A real-time traffic simulation system*, IEEE Transactions on Vehicular Technology, Vol. 47, Issue 1, pp. 321-331, 1998.
<https://doi.org/10.1109/25.661057>
<http://www.cs.utsa.edu/~atc/pub/J23.pdf>
- [J22] A. T. Chronopoulos, G. Wang, *Parallel solution of a traffic flow simulation problem*, Parallel Computing, Vol. 22, Issue 14, pp. 1965-1983, 1997. doi: 10.1016/s0167-8191(97)00070-7
<https://doi.org/10.3141/1566-04>
<http://www.cs.utsa.edu/~atc/pub/J22.pdf>
- [J21] A. T. Chronopoulos, G. Wang, *Traffic Flow Simulation through Parallel Processing*, Transportation Research Record, Vol. 1566, pp. 31-38, 1996. DOI: 10.1016/S0167-8191(97)00070-7
<https://doi.org/10.3141/1566-04>
<http://www.cs.utsa.edu/~atc/pub/J21.pdf>
- [J20] D. Papadopoulos, C. Siettos, A.G. Boudouvis, A. T. Chronopoulos, *Stability analysis of magnetohydrostatic equilibrium by the finite element method and Arnoldi and Lanczos eigensolvers*, Advances in Engineering Software, Vol. 27, Issues 1-2, pp. 145-153, 1996.
[https://doi.org/10.1016/0965-9978\(96\)00018-X](https://doi.org/10.1016/0965-9978(96)00018-X)

- <http://www.cs.utsa.edu/~atc/pub/J20.pdf>
 [J19] A. M. Wissink, A. S. Lyrintzis, A. T. Chronopoulos, *Efficient iterative methods applied to the solution of transonic flows*, Journal of Computational Physics, Vol. 123, Issue 2, pp. 379-393, 1996.
<https://doi.org/10.1006/jcph.1996.0031>
<http://www.cs.utsa.edu/~atc/pub/J19.pdf>
- [J18]* A. T. Chronopoulos, C. D. Swanson, *Parallel iterative S-step methods for unsymmetric linear systems*, Parallel Computing, Vol. 22, Issue 5, pp. 623-641, 1996.
[https://doi.org/10.1016/0167-8191\(96\)00022-1](https://doi.org/10.1016/0167-8191(96)00022-1)
<http://www.cs.utsa.edu/~atc/pub/J18.pdf>
- [J17] A. T. Chronopoulos, *On the squared unsymmetric Lanczos method*, Journal of Computational and Applied Mathematics, Vol. 54, Issue 1, pp. 65-78, 1994.
[https://doi.org/10.1016/0377-0427\(94\)90395-6](https://doi.org/10.1016/0377-0427(94)90395-6)
<http://www.cs.utsa.edu/~atc/pub/J17.pdf>
- [J16] O. Axelsson, A. T. Chronopoulos, *On nonlinear generalized conjugate gradient methods*, Numerische Mathematik, Vol. 69, Issue 1, pp. 1-15, 1994.
<https://doi.org/10.1007/s002110050076>
<http://www.cs.utsa.edu/~atc/pub/J16.pdf>
- [J15] H. Dong, A. T. Chronopoulos, J. Zou, A. Gopinath, *Vectorial integrated finite-difference analysis of dielectric waveguides*, IEEE Journal of Lightwave Technology, Vol. 11, Issue 10, pp. 1559-1564, 1993.
<https://doi.org/10.1109/50.249896>
<http://www.cs.utsa.edu/~atc/pub/J15.pdf>
- [J14] A. T. Chronopoulos, C. Pedro, *Iterative methods for nonsymmetric systems in DAEs and stiff ODEs codes*, (IMACS) Mathematics and Computers in Simulation, Vol. 35, Issue 3, pp. 211-232, 1993.
[https://doi.org/10.1016/0378-4754\(93\)90002-C](https://doi.org/10.1016/0378-4754(93)90002-C)
<http://www.cs.utsa.edu/~atc/pub/J14.pdf>
- [J13] A. T. Chronopoulos, A. Lyrintzis, P. Michalopoulos, C. Rhee and P. Yi, *Traffic flow simulation through high order traffic modelling*, Mathematical and Computer Modeling, Vol. 17, Issue 8, pp. 11-22, 1993.
[https://doi.org/10.1016/0895-7177\(93\)90150-W](https://doi.org/10.1016/0895-7177(93)90150-W)
<http://www.cs.utsa.edu/~atc/pub/J13.pdf>
- [J12] A. Lyrintzis, A. M. Wissink, A. T. Chronopoulos, *Efficient iterative methods for the transonic small disturbance equation*, The AIAA Journal, Vol. 30, No. 10, pp. 2556-2558, 1992.
<https://doi.org/10.2514/3.11263>
<http://www.cs.utsa.edu/~atc/pub/J12.pdf>
- [J11] A. T. Chronopoulos, P. Michalopoulos, J. Donohoe, *Efficient traffic flow simulation computations*, Mathematical and Computer Modeling, Vol. 16, Issue 5, pp. 107-120, 1992.
[https://doi.org/10.1016/0895-7177\(92\)90123-3](https://doi.org/10.1016/0895-7177(92)90123-3)
<http://www.cs.utsa.edu/~atc/pub/J11.pdf>
- [J10] A. T. Chronopoulos, Z. Zlatev, *Iterative methods for nonlinear operator equations*, Applied Mathematics and Computation, Elsevier, Vol. 51, Issues 2-3, pp. 167-180, 1992.
[https://doi.org/10.1016/0096-3003\(92\)90072-9](https://doi.org/10.1016/0096-3003(92)90072-9)
<http://www.cs.utsa.edu/~atc/pub/J10.pdf>
- [J9]* S. K. Kim, A. T. Chronopoulos, *An Efficient Parallel Algorithm for Extreme Eigenvalues of Sparse Nonsymmetric Matrices*, International Journal of High Performance Computing Applications, Vol. 6, Issue 4,
<https://doi.org/10.1177/109434209200600411>
<http://www.cs.utsa.edu/~atc/pub/J9.pdf>
- [J8]* S. K. Kim, A. T. Chronopoulos, *An efficient nonsymmetric Lanczos method on parallel vector computers*, Journal of Computational and Applied Mathematics, Vol. 42, Issue 3, pp. 357-374, 30 Oct 1992.
[https://doi.org/10.1016/0377-0427\(92\)90085-C](https://doi.org/10.1016/0377-0427(92)90085-C)
<http://www.cs.utsa.edu/~atc/pub/J8.pdf>
- [J7] A. T. Chronopoulos, *Nonlinear CG-like Iterative Methods*, Journal of Computational and Applied Mathematics, Vol. 40, Issue 1, pp. 73-89, 12 June 1992.
[https://doi.org/10.1016/0377-0427\(92\)90043-W](https://doi.org/10.1016/0377-0427(92)90043-W)
<http://www.cs.utsa.edu/~atc/pub/J7.pdf>
- [J6] A. T. Chronopoulos, C. R. Swaminathan, V. R. Voller, *The Stefan Problem Solved via Conjugate Gradient-Like Iterative Methods On a Parallel Vector Machine*, International Journal of High Performance Computing Applications, Vol. 5, No. 3, pp. 74-91, 1991.

<https://doi.org/10.1177/109434209100500307>

<http://www.cs.utsa.edu/~atc/pub/J6.pdf>

[J5]* S. K. Kim, A. T. Chronopoulos, *A class of Lanczos-like algorithms implemented on parallel computers*, Parallel Computing, Vol. 17, Issues 6-7, pp. 763-778, 1991.

[https://doi.org/10.1016/S0167-8191\(05\)80065-1](https://doi.org/10.1016/S0167-8191(05)80065-1)

<http://www.cs.utsa.edu/~atc/pub/J5.pdf>

[J4]* A. T. Chronopoulos, *s-Step Iterative Methods for (Non)Symmetric (In)Definite Linear Systems*, SIAM Journal on Numerical Analysis, Vol. 28, Issue 6, pp. 1776-1789, 1991.

<https://doi.org/10.1137/0728088>

<http://www.cs.utsa.edu/~atc/pub/J4.pdf>

[J3]* Sangback Ma, A. T. Chronopoulos, *Implementation of Iterative Methods for Large Sparse Nonsymmetric Linear Systems On a Parallel Vector Machine*, International Journal of High Performance Computing Applications, Vol. 4, Issue 4, pp. 9-24, December 1, 1990.

<https://doi.org/10.1177/109434209000400402>

<http://www.cs.utsa.edu/~atc/pub/J3.pdf>

[J2]* A. T. Chronopoulos, C. W. Gear, *On the efficient implementation of preconditioned s-step conjugate gradient methods on multiprocessors with memory hierarchy*, Parallel Computing, Vol. 11, Issue 1, pp. 37-53, 1989.

[https://doi.org/10.1016/0167-8191\(89\)90062-8](https://doi.org/10.1016/0167-8191(89)90062-8)

<http://www.cs.utsa.edu/~atc/pub/J2.pdf>

[J1]* A. T. Chronopoulos, C. W. Gear, *s-step iterative methods for symmetric linear systems*, Journal of Computational and Applied Mathematics, Vol. 25, Issue 2, pp. 153-168, 1989.

[https://doi.org/10.1016/0377-0427\(89\)90045-9](https://doi.org/10.1016/0377-0427(89)90045-9)

<http://www.cs.utsa.edu/~atc/pub/J1.pdf>

ACM/IEEE Refereed Conference Proceedings Publications

[C51] X. Zhang, S. Gaddam, A.T. Chronopoulos, *Ceph Distributed File System Benchmarks on an Openstack Cloud*, IEEE International Conference on Cloud Computing in Emerging Markets (IEEE CCEM 2015), 25-27 November, 2015, Bangalore, India.

<http://www.cs.utsa.edu/~atc/pub/C51.pdf>

[C50] P. Rad, A.T. Chronopoulos, P. Lama, P. Madduri, C. Loader, *Benchmarking Bare Metal Cloud Servers for HPC Applications*, IEEE International Conference on Cloud Computing in Emerging Markets (IEEE CCEM 2015), 25-27 November, 2015, Bangalore, India.

<http://www.cs.utsa.edu/~atc/pub/C50.pdf>

[C49] Y. Han, A. T. Chronopoulos, *A Resilient Hierarchical Distributed Loop Self-Scheduling Scheme for Cloud Systems*, Proceed. of IEEE NCA 2014, The 13th IEEE International Symposium on Network Computing and Applications, pp. 81-84, Boston, MA, USA, August 2014.

<http://www.cs.utsa.edu/~atc/pub/C49.pdf>

[C48] M. Meshabi, A. M. Rahmani, A. T. Chronopoulos, *Cloud Light Weight: a New Solution for Load Balancing in Cloud Computing*, Proceed. of IEEE 2014 International Conference on Data Science & Engineering (ICDSE), pp. 44-50, Kerala, India, August 26-28, 2014.

<http://www.cs.utsa.edu/~atc/pub/C48.pdf>

[C47] Weiliang Luo, Nima Golpavar, Carlos Cardenas, Anthony T. Chronopoulos, *Benchmarking Joyent SmartDataCenter for Hadoop MapReduce and MPI Operations*, IEEE International Conference on Cloud Computing in Emerging Markets (IEEE CCEM 2013), pp. 1-6, Bangalore, INDIA, 16-18 October 2013.

<http://www.cs.utsa.edu/~atc/pub/C47.pdf>

[C46] Y. Han, A. T. Chronopoulos, *A Hierarchical Distributed Loop Self-Scheduling Scheme for Cloud Systems*, Proceedings of IEEE NCA 2013, The 12th IEEE International Symposium on Network Computing and Applications, pp. 7-10, Boston, MA, USA, August 2013.

<http://www.cs.utsa.edu/~atc/pub/C46.pdf>

[C45] Y. Han, A. T. Chronopoulos, *Distributed Loop Scheduling Schemes for Cloud Systems*, Proceedings of the 27th IEEE International Parallel and Distributed Processing Symposium, High-Performance Grid and Cloud Computing Workshop, pp. 955-962, Boston, Massachusetts, USA, May 2013.

<http://www.cs.utsa.edu/~atc/pub/C45.pdf>

[C44] Y. Han, A. T. Chronopoulos, *Scalable Loop Self-Scheduling Schemes Implemented on Large-Scale Clusters*, Proceedings of the 27th IEEE International Parallel and Distributed Processing Symposium, Large-Scale Parallel Processing Workshop, pp. 1735-1742, Boston, Massachusetts, USA, May 2013.

<http://www.cs.utsa.edu/~atc/pub/C44.pdf>

[C43] M. Madhukar, S. Agaian, A.T. Chronopoulos, *Deterministic Model for Acute Myelogenous Leukemia Classification*, IEEE International Conference on Systems, Man, and Cybernetics (IEEE SMC 2012), Seoul, Korea, pp. 433-438, 14-17 October 2012.

<http://www.cs.utsa.edu/~atc/pub/C43.pdf>

[C42] A. T. Chronopoulos, S. Penmatsa, N. Jayakumar, E. Ogharandukun, *Two-Dimensional Dynamic Loop Scheduling Schemes for Computer Clusters*, Proceedings of IEEE NCA 2012, The 11th International Symposium on Network Computing and Applications, Boston, MA, pp. 96-100, 23-25 August 2012.

<http://www.cs.utsa.edu/~atc/pub/C42.pdf>

[C41] S. Penmatsa, A. T. Chronopoulos, *Comparison of Price-Based Static and Dynamic Job Allocation Schemes for Grid Computing Systems*, Proceedings of IEEE NCA 2009, The 8th International Symposium on Network Computing and Applications, Boston, MA, pp. 66 -73, 9-11 July 2009.

<http://www.cs.utsa.edu/~atc/pub/C41.pdf>

[C40] I. Riakiotakis, G. Papakonstantinou, 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), pp. 11-18, 11-13 June 2008.

<http://www.cs.utsa.edu/~atc/pub/C40.pdf>

[C39] M. Ciorba, I. Riakiotakis, T. Andronikos, A. T. Chronopoulos, G. Papakonstantinou, *Optimal Synchronization Frequency for Dynamic Pipelined Computations on Heterogeneous Systems*, Proceedings of the IEEE International Conference on Cluster Computing, Austin, Texas, USA, pp. 410-415, 17-20 September 2007.

<http://www.cs.utsa.edu/~atc/pub/C39.pdf>

[C38] K. Kyriakopoulos, A. T. Chronopoulos, L. Ni, *An Optimal Scheduling Scheme for Tiling in Distributed Systems*, Proceedings of the IEEE International Conference on Cluster Computing, Austin, Texas, USA, pp. 267-274, 17-20 September 2007.

<http://www.cs.utsa.edu/~atc/pub/C38.pdf>

[C37] A. T. Chronopoulos, L. Ni, S. Penmatsa, *Multi-Dimensional Dynamic Loop Scheduling Algorithms*, Proceedings of the IEEE International Conference on Cluster Computing, Austin, Texas, USA, pp. 241-248, 17-20 September 2007.

<http://www.cs.utsa.edu/~atc/pub/C37.pdf>

[C36] 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, , Brashov, Romania, pp. 403 - 403, 15-19 September 2007.

<http://www.cs.utsa.edu/~atc/pub/C36.pdf>

[C35] M. Musku, A. T. Chronopoulos, S. Penmatsa, D. Popescu, *A Game Theoretic Approach for Medium Access of Open Spectrum in Cognitive Radios*, Proceedings of the Second IEEE International Conference on Cognitive Radio (CrownCom 2007), Orlando, Florida, USA, pp. 336-341, July 31 - August 3 2007.

<http://www.cs.utsa.edu/~atc/pub/C35.pdf>

[C34] S. Penmatsa, A. T. Chronopoulos, N. T. Karonis, 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, pp. 1-8, 26-30 March 2007.

<http://www.cs.utsa.edu/~atc/pub/C34.pdf>

[C33] S. Penmatsa, 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, pp. 1-10, 26-30 March 2007.

<http://www.cs.utsa.edu/~atc/pub/C33.pdf>

[C32] C. Tang, A. T. Chronopoulos, P. Cota, *An Iterative Power Allocation Scheme for Spread Spectrum Wireless Systems*, Proceedings of IEEE International Symposium on Wireless Pervasive Computing, Puerto Rico, pp. 600-605, 5-7 February 2007.

<http://www.cs.utsa.edu/~atc/pub/C32.pdf>

[C31] S. Penmatsa, 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, pp. 1-8, 25-29 April 2006.

<http://www.cs.utsa.edu/~atc/pub/C31.pdf>

- [C30] S. Penmatsa, 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, pp. 1-8, 25-29 April 2006.
<http://www.cs.utsa.edu/~atc/pub/C30.pdf>
- [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 and Distributed Processing Symposium, Rhodes, Greece, pp. 1-10, 25-29 April 2006.
<http://www.cs.utsa.edu/~atc/pub/C29.pdf>
- [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, Las Vegas NV, pp. 1258 – 1262, 8-10 January 2006.
<http://www.cs.utsa.edu/~atc/pub/C28.pdf>
- [C27] M. Musku, A. T. Chronopoulos, D. Popescu, *Joint Rate and Power Control with Pricing*, Proceedings of IEEE Globecom 2005, Vol. 6, pp. 3466 - 3470, 28 November-2 December 2005.
<http://www.cs.utsa.edu/~atc/pub/C27.pdf>
- [C26] C. Tang, A. T. Chronopoulos, C. S. Raghavendra, *Soft-Timeout Distributed Key Generation for Digital Signature based on Elliptic Curve D-log for Low-power Devices*, Proceedings of IEEE SecureComm 2005, The 1st IEEE/CreateNet International Conference on Security and Privacy for Emerging Areas in Communication Networks, Athens, Greece, pp. 353-364, 4-9 September 2005.
<http://www.cs.utsa.edu/~atc/pub/C26.pdf>
- [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, Iasi, Romania, pp. 263-268, July 2005.
<http://www.cs.utsa.edu/~atc/pub/C25.pdf>
- [C24] C. Tang, A. T. Chronopoulos, *An Efficient Distributed Key Generation Protocol for Secure Communications with Causal Ordering*, Proceedings of IEEE ICPADS 2005, The 11th International Conference on Parallel and Distributed Systems, Vol. 2, Fukuoka, Japan, pp. 285 - 289, 20-22 July 2005.
<http://www.cs.utsa.edu/~atc/pub/C24.pdf>
- [C23] S. Penmatsa, A. T. Chronopoulos, *Job Allocation Schemes in Computational Grids based on Cost Optimization*, Proceedings of IEEE IPDPS 2005, 19th International Parallel & Distributed Processing Symposium, Denver, Colorado, pp. 180-187, April 2005.
<http://www.cs.utsa.edu/~atc/pub/C23.pdf>
- [C22] D. Popescu, A. T. Chronopoulos, *Power Control and Utility Optimization in Wireless Communication Systems*, Proceedings of IEEE VTC '05, The 61st IEEE Vehicular Technology Conference, Vol. 1, Stockholm, Sweden, pp. 314 - 318, 30 May-1 June 2005.
<http://www.cs.utsa.edu/~atc/pub/C22.pdf>
- [C21] A. T. Chronopoulos, F. Balbi, D. Veljkovic, N. Kolani, *Implementation of Distributed Key Generation Algorithms using Secure Sockets*, Proceedings of NCA 2004, The 3rd IEEE International Symposium on Network Computing and Applications, Cambridge, MA, USA, pp. 393-398, 30 August 2004.
<http://www.cs.utsa.edu/~atc/pub/C21.pdf>
- [C20] A. T. Chronopoulos, P. Cotae, S. Ponipireddy, *Efficient Power Control for Broadcast in Wireless Communication Systems*, Proceedings of IEEE WCNC '04, The IEEE Wireless Communications and Networking Conference, Vol. 3, Atlanta, GA, pp. 1330 - 1334, 21-25 March 2004.
<http://www.cs.utsa.edu/~atc/pub/C20.pdf>
- [C19] D. Grosu, A.T. Chronopoulos, *A truthful mechanism for fair load balancing in distributed systems*, Proceedings of IEEE NCA 2003, The 2nd International Symposium on Network Computing and Applications, Boston, MA, pp. 289 -296, 16-18 April 2003.
<http://www.cs.utsa.edu/~atc/pub/C19.pdf>
- [C18] D. Grosu, A.T. Chronopoulos, *A load balancing mechanism with verification*, Proceedings of IEEE IPDPS'03, The 17th International Parallel and Distributed Processing Symposium, Nice, France, pp. 163 - 170, 22-26 April 2003.
<http://www.cs.utsa.edu/~atc/pub/C18.pdf>
- [C17] A.T. Chronopoulos, S. Penmatsa, N. Yu, *Scalable Loop Self-Scheduling Schemes for Heterogeneous Clusters*, Proceedings of CLUSTER 2002, The 4th IEEE International Conference on Cluster Computing, Chicago, Illinois, pp. 353-359, 24-26 September 2002.
<http://www.cs.utsa.edu/~atc/pub/C17.pdf>

- [C16] S. Jagannathan, A. Tohmaz, A. T. Chronopoulos, H.G. Cheung, *Adaptive Admission Control of Multimedia Traffic in High-Speed Networks*, Proceedings of IEEE ISIC'02, The 17th IEEE International Symposium on Intelligent Control Vancouver, Canada, pp. 728-733, 27-30 October 2002.
<http://www.cs.utsa.edu/~atc/pub/C16.pdf>
- [C15] S. Jagannathan, A. T. Chronopoulos, S. Ponipireddy, *Distributed Power Control in Wireless Communication Systems*, Proceedings of IEEE ICCCN 2002, The 11th International Conference on Computer Communications and Networks, Miami, Florida, pp 493-496, 14-16 October 2002.
<http://www.cs.utsa.edu/~atc/pub/C15.pdf>
- [C14] D. Grosu, A.T. Chronopoulos, *Algorithmic Mechanism Design for Load Balancing in Distributed Systems*, Proceedings of IEEE CLUSTER 2002, 4th IEEE International Conference on Cluster Computing, Chicago, Illinois, pp. 445-454, 24-26 September 2002.
<http://www.cs.utsa.edu/~atc/pub/C14.pdf>
- [C13] A. T. Chronopoulos, J. Sarangapani, *A Distributed Discrete-Time Neural Network Architecture for Pattern Allocation and Control*, Proceedings of IEEE IPDPS 2002, The 16th International Parallel and Distributed Processing Symposium , 3rd Workshop on Bio-Inspired Solutions to Parallel Processing Problems (BioSP3), Fort Lauderdale, Florida, pp. 204-211, 15-19 April 2002.
<http://www.cs.utsa.edu/~atc/pub/C13.pdf>
- [C12] D. Grosu, A. T. Chronopoulos, *A Game-Theoretic Model and Algorithm for Load Balancing in Distributed Systems*, Proceedings of IEEE IPDPS 2002, The 16th International Parallel and Distributed Processing Symposium, 4th Workshop on Advances in Parallel and Distributed Computational Models (APDCM'02), Fort Lauderdale, Florida, pp. 146-153, 15-19 April 2002.
<http://www.cs.utsa.edu/~atc/pub/C12.pdf>
- [C11] D. Grosu, A. T. Chronopoulos, M.Y. Leung, *Load Balancing in Distributed Systems: An Approach Using Cooperative Games*, Proceedings of IEEE IPDPS 2002, The 16th International Parallel and Distributed Processing Symposium, Fort Lauderdale, Florida, pp. 8-11, 15-19 April 2002.
<http://www.cs.utsa.edu/~atc/pub/C11.pdf>
- [C10] A. T. Chronopoulos, R. Andonie, M. Benche, D. Grosu, *A Class of Loop Self-Scheduling for Heterogeneous Clusters*, Proceedings of CLUSTER 2001, The 3rd IEEE International Conference on Cluster Computing, Newport Beach, CA, pp. 282-291, 8-11 October 2001.
<http://www.cs.utsa.edu/~atc/pub/C10.pdf>
- [C9] A. T. Chronopoulos, D. Grosu, A. Wissink, M. Benche, *Static Load Balancing for CFD Simulations on a Network of Workstations*, Proceedings of NCA 2001, The 1st IEEE International Symposium on Network Computing & Applications, Cambridge, MA, pp. 364-367, 8-10 October 2001.
<http://www.cs.utsa.edu/~atc/pub/C9.pdf>
- [C8] C. Johnston, A. T. Chronopoulos, *A Communication Latency Hiding Parallelization of a Traffic Flow Simulation*, Proceedings of IEEE IPPS '99/SPDP '99, The 13th International Parallel Processing Symposium and 10th Symposium on Parallel and Distributed Processing, Puerto Rico, pp. 688-695, 12-16 April 1999.
<http://www.cs.utsa.edu/~atc/pub/C8.pdf>
- [C7] C. Johnston, A. T. Chronopoulos, *The Parallelization of a Highway Traffic Flow Simulation*, Proceedings of IEEE Frontiers '99, The Seventh Symposium on the Frontiers of Massively Parallel Computation, Annapolis, Maryland, pp. 192-199, 21-25 February 1999.
<http://www.cs.utsa.edu/~atc/pub/C7.pdf>
- [C6] E. Yaprak, A. T. Chronopoulos, K. Psarris, Y. Xiao, *Adaptive buffer threshold updating for an ATM switch*, Proceedings of ISCC'98, The Third IEEE Symposium on Computers and Communications, Athens, Greece, pp. 400-405, 30 June - 2 July 1998.
<http://www.cs.utsa.edu/~atc/pub/C6.pdf>
- [C5] C. Tang, A. T. Chronopoulos, E. Yaprak, *A Cell Burst Scheduling for ATM Networking. II. Implementation*, Proceedings of ISCC'98, The Third IEEE Symposium on Computers and Communications, Athens, Greece, pp. 462-467, 30 June 30-2 July 1998.
<http://www.cs.utsa.edu/~atc/pub/C5.pdf>
- [C4] C. Tang, A. T. Chronopoulos, E. Yaprak, *A Cell Burst Scheduling for ATM Networking. I. Theory*, Proceedings of ISCC'98, The Third IEEE Symposium on Computers and Communications, Athens, Greece, pp. 455-461, 30 June - 2 July 1998.
<http://www.cs.utsa.edu/~atc/pub/C4.pdf>
- [C3] S. Ziaavras, H. Grebel, A. T. Chronopoulos, *A Low-Complexity Parallel System for Gracious, Scalable Performance. Case Study for Near PetaFLOPS Computing*, Proceedings of IEEE Frontiers'96, The Sixth

Symposium on the Frontiers of Massively Parallel Computation, Annapolis, Maryland, pp. 363-370, October 1996.

<http://www.cs.utsa.edu/~atc/pub/C3.pdf>

[C2] C. Swanson, A. T. Chronopoulos, *Orthogonal s-step methods for nonsymmetric linear systems of equations*, Proceedings of ICS '92, The 6th ACM International Conference on Supercomputing, Washington, D.C., pp. 456-465, July 1992.

<http://www.cs.utsa.edu/~atc/pub/C2.pdf>

[C1] A. T. Chronopoulos, *Towards Efficient Parallel Implementation of the CG Method Applied to a Class of Block Tridiagonal Linear Systems*, Proceedings of IEEE/ACM Supercomputing '91, Albuquerque, New Mexico, pp. 578-587, 18-22 November 1991.

<http://www.cs.utsa.edu/~atc/pub/C1.pdf>

Other Refereed Conference Proceedings Publications

[OC20] L. Aaleswara, D. Akopian, A. T. Chronopoulos, *A privacy protection for an mHealth messaging system*, Proc. SPIE 9411, Mobile Devices and Multimedia: Enabling Technologies, Algorithms, and Applications 2015, 94110S1-94110S8, 11 March, 2015.

<http://www.cs.utsa.edu/~atc/pub/OC20.pdf>

[OC19] M. Madhukar, S. Agaian, A.T. Chronopoulos, *New decision support tool for acute lymphoblastic leukemia classification*, Proc. SPIE 8295, Image Processing: Algorithms and Systems X; and Parallel Processing for Imaging Applications II, IS&T/SPIE, San Francisco, Vol. 8295, pp. 829518-1, 829518-12, 22-26 January 2012.

<http://www.cs.utsa.edu/~atc/pub/OC19.pdf>

[OC18] A.T. Chronopoulos, D. Grosu, H. Kikuchi, *A New Efficient Polynomial Degree Resolution Protocol and Its Application to the (M+1)-st Price Private Auction*, Proceedings of ACNS'04, 2nd International Conference on Applied Cryptography and Network Security, Yellow Mountain, China, pp. 358-367, 8-11 June 2004.

<http://www.cs.utsa.edu/~atc/pub/OC18.pdf>

[OC17] A. T. Chronopoulos, S. Ponipireddy, J. Sarangapani, *Constructing Energy-Efficient Broadcast Trees in Wireless Ad Hoc Networks*, Proceedings of the International Symposium on Parallel and Distributed Computing, Iasi, Romania, Sci. Ann. Cuza Univ., 11, pp. 205-213, 17-20 July 2002.

<http://www.cs.utsa.edu/~atc/pub/OC17.pdf>

[OC16] A. T. Chronopoulos, A. B. Kucherov, *A Parallel Krylov-Type Method for Nonsymmetric Linear Systems*, Proceedings of the IEEE (sponsored) International Conference on High-Performance Computing, Hyderabad, India, pp. 104-114, 17-20 December 2001- Springer.

<http://www.cs.utsa.edu/~atc/pub/OC16.pdf>

[OC15] Jianhua Xu, A. T. Chronopoulos *Distributed Self-Scheduling for Heterogeneous Workstation Clusters*, Proceedings of the ISCA 12th International Conference on Parallel and Distributed Computing Systems, Fort Lauderdale, FL, pp. 211-217, 18-20 August 1999.

<http://www.cs.utsa.edu/~atc/pub/OC15.pdf>

[OC14] 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, Las Vegas, Nevada, pp. 555-560, 23-31 October 1998.

<http://www.cs.utsa.edu/~atc/pub/OC14.pdf>

[OC13] A. T. Chronopoulos, C. Tang, *An Efficient Implementation of Burst Fair Queuing for ATM Networking*, Proceedings of the 10th IASTED International Conference on Parallel and Distributed Computing Systems, Las Vegas, Nevada, pp. 326-333, 23-31 October 1998.

<http://www.cs.utsa.edu/~atc/pub/OC13.pdf>

[OC12] H. Jiang, A. T. Chronopoulos, G. Papakonstantinou, P. Tsanakas, *A Path-Driven Loop Scheduling Mapped onto Generalized Hypercubes*, Proceedings of 10th IASTED International Conference on Parallel and Distributed Computing Systems, Las Vegas, Nevada, pp. 7-13, 23-31 October 1998.

<http://www.cs.utsa.edu/~atc/pub/OC12.pdf>

[OC11] A. T. Chronopoulos, Y. Gong, H. Grebel, S. Ziavras, *Performance Evaluation of a 100-TeraOps Parallel System*, Proceedings of the ISCA 11th International Conference on Parallel and Distributed Computing Systems, Chicago, IL, pp. 204-211, 2-4 September 1998.

<http://www.cs.utsa.edu/~atc/pub/OC11.pdf>

- [OC10] A. M. Wissink, A. S. Lyrintzis, A. T. Chronopoulos, *A Parallel Newton-Krylov Method for Rotorcraft Flowfield Calculations*, Proceedings paper AIAA-97-2049. Presented at the 13th AIAA Computational Fluid Dynamics Conference, Snowmass Village, Colorado, pp. 1060-1070, June 1997.
<http://www.cs.utsa.edu/~atc/pub/OC10.pdf>
- [OC9] A. M. Wissink, A. S. Lyrintzis, and A. T. Chronopoulos, *Parallel Krylov Solvers Applied to the Rotorcraft CFD code TURNS*, Proceedings of the 1996 Computational Aerosciences (CAS) Workshop, NASA Ames Research Center, Aug. 1996, NASA Conference Publication CD 20011, pp. 43-48, May 1997.
- [OC8] S. Ziavras, H. Grebel, A. T. Chronopoulos, *A Scalable-Feasible Parallel Computer Implementing Electronic and Optical Interconnections for 156 TeraOps Minimum Performance*, Proceedings of PetaFLOPS Architecture Workshop, Oxnard, California, pp. 179-209, April 1996 .
- [OC7] A. M. Wissink, A. S. Lyrintzis, A. T. Chronopoulos, *High Performance Computing Techniques for Solving the Transonic Small Disturbance Equation*, AIAA Proceedings Paper 95-0576, 33rd AIAA Aerosciences Conference, Reno, Nevada, pp. 1-12, January 1995.
- [OC6] D. Papadopoulos, C. Siettos, A. G. Boudouvis, A. T. Chronopoulos, *Implementation and Performance of Arnoldi and Lanczos Eigensolvers in Galerkin-Finite Element Computations*, Proceedings of Advances in Computational Mechanics, CICIL-COMP Ltd, Edinburgh, Scotland, M. Papadrakakis and B.H.V. Topping (Editors), 1994; Second International Conference on Computational Structures Technology, Athens, Greece, pp. 1-9, August 1994.
- [OC5] H. Dong, A. T. Chronopoulos, A. Gopinath, *Vectorial Integrated Finite-difference Analysis of Dielectric Waveguide Without Spurious Modes*, Proceedings of Integrated Photonics Research Topical Meeting, sponsored by Optical Society of America, Palm Springs, California, pp. 225-228, March 1993.
- [OC4] A. T. Chronopoulos, M. Pernice, *Vector Preconditioned s-step Methods on the IBM 3090/600S/6VF*, Proceedings of Fifth SIAM Conference on Parallel Processing, Houston, Texas, pp. 130-137, March 1991.
- [OC3] A. T. Chronopoulos, Z. Zlatev, *Iterative Methods for Nonlinear Operator Equations*, Proceedings of Sixth Southeastern Approximation Theory Conference, Lecture Notes in Pure and Applied Mathematics, Marcel-Dekker, Vol. 138, Memphis State University, Memphis, Tennessee, pp. 243-256, March 1991.
<http://www.cs.utsa.edu/~atc/pub/OC3.pdf>
- [OC2] S. Kim, A. T. Chronopoulos, *An Efficient Arnoldi Method Implemented on Parallel Computers*, Proceedings of International Conference on Parallel Processing, Vol. III, Pheasant Run Resort St. Charles, Illinois, pp. 167- 170, August 1991.
- [OC1] A. T. Chronopoulos, *Parallel Iterative Methods for (Non)Symmetric (In)Definite Linear Systems*, Extended Abstract, Proceedings of the Fourth SIAM Conference on Parallel Processing for Scientific Computing, Chicago, Illinois, pp. 63-65, 11-13 December 1989.

Other (Non-overlapping) Publications

- [OP13] T. Abe, A. T. Chronopoulos (2017), *Convergence characteristics of the generalized residual cutting method*. *arXiv preprint [arXiv:1709.07184](https://arxiv.org/abs/1709.07184)*, 21 Sept 2017
- [OP12] Xu, M., Wang, Y., Chronopoulos, A. T., & Yue, H. (2017). *Performance Optimization and Parallelization of a Parabolic Equation Solver in Computational Ocean Acoustics on Modern Many-core Computer*. *arXiv preprint [arXiv:1711.00005v2](https://arxiv.org/abs/1711.00005v2)*, 11 November 2017
- [OP11] Wang, Y. X., Zhang, L. L., Liu, W., Cheng, X. H., Zhuang, Y., & Chronopoulos, A. T. (2017). *Performance optimizations for scalable CFD applications on hybrid CPU+ MIC heterogeneous computing system with millions of cores*. *arXiv preprint [arXiv:1710.09995v1](https://arxiv.org/abs/1710.09995v1)*, October 2017
- [OP10] R Ranjan, Y Feng, A Chronopoulos, *Augmented Stabilized Formulations with Fictitious Boundary Conditions*, CS-TR-2016-010, Department of Computer Science, University of Texas at San Antonio, December 2016
<http://www.cs.utsa.edu/~atc/pub/OP10.pdf>
- [OP9] A. T. Chronopoulos, I. K. Sethi, *Traffic route generation and adaptation using case-based reasoning (Commentary)*, ITS JOURNAL (GORDON BREACH PUBLISHING, TAYLOR & FRANCIS GROUP), Vol. 3, Issue 3, pp. 252-254, 1996.
<http://www.cs.utsa.edu/~atc/pub/OP9.pdf>
- [OP8] A. T. Chronopoulos, S. K. Kim, A. T. Chronopoulos and S. K. Kim, *s-Step Orthomin and GMRES implemented on parallel computers*, Technical Report UMSI 90/43R, University of Minnesota Supercomputing Institute, Minneapolis, 1990. Also, published as: *Towards Efficient Parallel Implementation of s-step Iterative Methods*, Supercomputer, Vol. 47, No. IX-1, pp. 4-17, 1992.
<http://www.cs.utsa.edu/~atc/pub/OP8.pdf>

- [OP7] G. Rockswold, A. T. Chronopoulos, *Efficient Parallel Implementation of Matrix-free Iterative Methods in Stiff ODE Codes*, Technical Report UMSI 91/16, University of Minnesota Supercomputing Institute, Minneapolis, Minnesota, pp. 1-13, 1991.
<http://www.cs.utsa.edu/faculty/atc/pub/OP7.pdf>
- [OP6] A. T. Chronopoulos, *A fast squared Lanczos method for nonsymmetric linear systems*, Technical Report UMSI 91310, University of Minnesota Supercomputing Institute, Minneapolis, Minnesota, pp. 1-25, 1991.
<http://www.cs.utsa.edu/~atc/pub/OP6.pdf>
- [OP5] A. T. Chronopoulos, *Krylov Subspace Iterative Methods for Nonsymmetric Indefinite Linear Systems*, Technical Report TR 90-21, Department of Computer Science, University of Minnesota, Minneapolis, Minnesota, pp. 1-27, 1990. Also, Army High Performance Computing Center preprint AHPCRC 91-23, 1991.
<http://www.cs.utsa.edu/~atc/pub/OP5.pdf>
- [OP4] Kim, S. K., A. T. Chronopoulos, *s-step Lanczos and Arnoldi Methods on Parallel Computers*, Technical Report UMSI 1990/14R, University of Minnesota Supercomputing Institute, Minneapolis, pp. 1-26, 1990.
<http://www.cs.utsa.edu/~atc/pub/OP4.pdf>
- [OP3] A. T. Chronopoulos, S. Ma, *On Squaring Krylov Subspace Iterative methods for Nonsymmetric Linear Systems*, Technical Report TR 89-67, Department of Computer Science, University of Minnesota, Minneapolis, Minnesota, pp. 1-28, 1989.
<http://www.cs.utsa.edu/~atc/pub/OP3.pdf>
- [OP2] S. K. Kim, A. T. Chronopoulos, *Multitasking Application using CRAY-2 on Arnoldi's Method for Computing a few Eigenvalues in a Large Sparse Matrix*, Technical Report UMSI 1988/142, University of Minnesota Supercomputing Institute, Minneapolis, Minnesota, pp. 1-19, 1988.
<http://www.cs.utsa.edu/~atc/pub/OP2.pdf>
- [OP1] A. T. Chronopoulos, *A Class of Parallel Iterative Methods Implemented on Multiprocessors*, Ph. D. thesis, Technical Report UIUCDCS-R-86-1267, Department of Computer Science, University of Illinois, Urbana, Illinois, pp. 1-116, Jan 1987.
<http://www.cs.utsa.edu/~atc/pub/OP1.pdf>