

# CURRICULUM VITA

## Henry J. Neeman

Director, OU Supercomputing Center for Education & Research  
(A Division of OU Information Technology)

Adjunct Assistant Professor, School of Computer Science  
University of Oklahoma

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### EDUCATION

Ph.D., Computer Science, University of Illinois at Urbana-Champaign, October 1996

Dissertation advisors: Michael L. Norman, Michael Heath, Dennis Gannon

Dissertation committee members: Donald Hearn, Faisal Saeed, Paul Saylor

M.S., Computer Science, University of Illinois at Urbana-Champaign, January 1990

Thesis advisors: Dennis Gannon, Donald Hearn

B.S., Computer Science (magna cum laude), State University of New York at Buffalo, May 1987

B.A., Statistics (magna cum laude; departmental honors), State University of New York at Buffalo,  
May 1987

Minor, Mathematics, State University of New York at Buffalo, May 1987

### PROFESSIONAL EXPERIENCE

8/2001 - present	Director OU Supercomputing Center for Education & Research University of Oklahoma, Norman, OK
1/2000 - present	Adjunct Assistant Professor School of Computer Science, University of Oklahoma
8/1998 - 6/2007	Research Scientist Center for Analysis & Prediction of Storms, University of Oklahoma
5/1996 - 8/1998	Postdoctoral Research Associate National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign
5/1993 - 5/1996	Graduate Research Assistant National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign
8/1987 - 5/1993	Graduate Research Assistant Center for Supercomputing Research & Development, University of Illinois at Urbana-Champaign
1/1985 - 8/1987	Undergraduate Researcher/Teaching Assistant Department of Physiology, State University of New York at Buffalo

## GRANTS

### **Total External Funding to Date (as PI, Co-PI or Senior Personnel): \$14,811,094**

2010 - 2013	<i>MRI: Acquisition of Extensible Petascale Storage for Data Intensive Research</i> PI with Co-PIs M. Jensen, M. Strauss, X. Xiao, M. Xue, Senior Personnel E. Baron, K. Dresback, R. Kolar, A. McGovern, R. Palmer, D. Papavassiliou, H. Severini, P. Skubic, T. Trafalis, M. Wenger, R. Wheeler (Duquesne U) National Science Foundation, \$792,925
2010 - 2012	<i>Oklahoma Optical Initiative</i> PI with Co-PIs J. Deaton (OneNet), D. Brunson (Oklahoma State U), Senior Personnel J. He (Samuel Roberts Noble Foundation), D. Schoenefeld (U Tulsa), J. Snow (Langston U), M. Strauss (OU), X. Xiao (OU), M. Xue (OU) National Science Foundation, \$1,176,470
2010	<i>Oklahoma Supercomputing Symposium 2010</i> , PI; Oklahoma EPSCoR, \$5,000
2009 - 2013	<i>Enabling Petascale Ensemble-Based Data Assimilation for the Numerical Analysis and Prediction of High-Impact Weather</i> , Co-PI with PI M. Xue (OU), Co-PIs X. Wang (OU), R. Barnes (OU), X. Li (Oklahoma State U), Senior Personnel S. Sanielevici (Pittsburgh Supercomputing Center) National Science Foundation, \$1,200,002
2009 - 2012	<i>A cyberCommons for Ecological Forecasting</i> , Senior Personnel with PI P. Risser, Co-PIs Y. Li, X. Xiang, L. Gruenwald, M. Palmer (Oklahoma State U), Senior Personnel J. Kelly, S. Lakshmirarahan, A. McGovern, C. Weaver National Science Foundation, \$5,999,999
2009 - 2010	<i>NSF Workshop High Performance Computing Center Sustainability</i> , Co-PI with PI S. Ahalt (Ohio Supercomputer Center), Co-PIs A. Apon (U. Arkansas), D. Lifka (Cornell U) National Science Foundation, \$49,613
2009	<i>Oklahoma Supercomputing Symposium 2009</i> , PI; Oklahoma EPSCoR, \$5,000
2008	<i>Oklahoma Supercomputing Symposium 2008</i> , PI; Oklahoma EPSCoR, \$5,000
2008	<i>Outer Boundary Forcing for Texas Coastal Models</i> , Co-PI with R. Kolar (PI), K. Dresback (Co-PI) Texas Water Development Board, \$20,000
2007 - 2012	<i>Assembling the Eutelost Tree of Life – Addressing the Major Unresolved Problem in Vertebrate Phylogeny</i> , Senior Personnel with R. Broughton (PI); Co-PIs E. Wiley (U Kansas), A. Lopez (U Florida), T. Grande (U Loyola-Chicago), L. Smith (Field Museum), K. Carpenter (Old Dominion U), J. Diamond (U Nebraska-Lincoln); Senior Personnel D. Hough (OU) National Science Foundation, \$3,000,000 (\$653,801 to OU)
2007 - 2010	<i>Challenges in Understanding Tornadogenesis and Associated Phenomena</i> , Senior Personnel with J. Straka (PI), K. Kanak (Co-PI), Davies-Jones (Co-PI) National Science Foundation, \$854,171
2007	<i>Oklahoma Supercomputing Symposium 2007</i> , PI; Oklahoma EPSCoR, \$5,000

## GRANTS

### **Total External Funding to Date (as PI, Co-PI or Senior Personnel): \$14,811,094** (continued)

2006 – 2010	<i>CI-TEAM: Cyberinfrastructure Education for Bioinformatics and Beyond</i> , PI with B. Roe (Co-PI), H. Severini (Co-PI), D. Wu (Co-PI) National Science Foundation, \$249,974
2006	<i>Oklahoma Supercomputing Symposium 2006</i> , PI; Oklahoma EPSCoR, \$5,000
2005 – 2007	<i>SGER: Cyberinfrastructure for Distributed Rapid Response to National Emergencies</i> , PI with H. Severini (Co-PI), National Science Foundation Small Grant for Exploratory Research, \$132,371
2005	<i>Oklahoma Supercomputing Symposium 2005</i> , PI Oklahoma EPSCoR, \$5,000 plus \$7,500 OU cost share
2004 – 2005	<i>Cross-Disciplinary and Statewide Curriculum for Preparatory Medical Physics Education</i> , Co-PI with T. Johnson (PI), D.H. Wu, B.K. Abbott, OU Faculty Senate Development Award, \$2,500
2004	<i>Oklahoma Supercomputing Symposium 2004</i> , PI; Oklahoma EPSCoR, \$14,000
2003 – 2006	<i>MRI: Acquisition of an Itanium Cluster for Grid Computing</i> , PI with K. Droegemeier, K. Mish, D. Papavassiliou, P. Skubic, J. Snow, A. Striz, D. Weber, National Science Foundation, \$340,000 plus \$164,000 OU cost share
2003	<i>Oklahoma Supercomputing Symposium 2003</i> , PI Oklahoma EPSCoR, \$14,000 plus \$2,500 OU cost share
2002 – 2006	<i>Integration of High Performance Computing in Nanotechnology: A Combined Research in Curricular Development</i> , PI with Lloyd Lee, Julia S. Mullen, Gerard K. Newman, National Science Foundation, \$399,998
2000 – 2003	<i>Adaptation of the Advanced Regional Prediction System to the Environmental Hydrology Workbench</i> , co-PI with Daniel Weber (PI), Baxter Vieux, Kelvin Droegemeier, National Center for Supercomputing Applications, \$310,000
2000 – 2003	<i>Integrated, Scalable MBS [Model-Based Simulation] for Flow Through Porous Media</i> , co-PI with Profs. Dimitrios Papavassiliou (PI) and Musharraf Zaman, National Science Foundation, \$150,071
2000 – 2001	<i>Predictions of Atmospheric Dispersion of Chemical and Biological Contaminants in the Urban Canopy</i> , co-PI with Profs. John Antonio and S. Lakshmivarahan, Department of Defense, \$75,000 (note that this was part of a larger project; PI Prof. Alan Graham, Texas Tech U)

## **TEACHING EXPERIENCE**

- SC07-SC11 conference Education Program Parallel & Cluster Computing workshop
  - Fall 2009: hosted at OU and co-instructed (in conjunction with the Oklahoma Supercomputing Symposium 2009)
  - Summer 2009: hosted at OU and co-instructed, co-instructed at Kean University, co-instructed at Louisiana State University;
  - Fall 2008: hosted at OU and co-instructed (in conjunction with the Oklahoma Supercomputing Symposium 2008)
  - Summer 2008: hosted at OU and co-instructed
  - Fall 2007: hosted at OU and co-instructed (in conjunction with the Oklahoma Supercomputing Symposium 2007)
- Blue Waters Undergraduate Petascale Institute workshop
  - Summer 2010: co-instructed
- National Computational Science Institute Parallel & Cluster Computing workshops
  - Summer 2010: hosted at OU and co-instructed (intermediate level)
  - Summer 2006: co-instructed (not hosted at OU)
  - Summer 2005: hosted at OU and co-instructed
  - Summer 2004: hosted at OU and co-instructed
  - Fall 2003: hosted at OU and co-instructed (in conjunction with the Oklahoma Supercomputing Symposium 2003)
- Linux Clusters Institute workshops
  - Feb 2007: hosted at OU and co-instructed
  - June 2005: hosted at OU and co-instructed
  - Feb 2005: co-instructed (not hosted at OU)
- Computer Programming for Non-majors (OU CS 1313) — Spring 2000, Fall 2000, Spring 2001, Spring 2002, Fall 2002, Spring 2003, Fall 2003, Spring 2004, Fall 2004, Fall 2005, Spring 2006, Fall 2006 Spring 2007, Fall 2007, Spring 2009, Fall 2010
- Data Structures (OU CS 2413) — Summer 2000
- “Supercomputing in Plain English” Workshop Series: taught to mixed audience of undergraduate students, graduate students, faculty and staff from 18 departments in 5 colleges — Fall 2001, Fall 2002, Fall 2004, Fall 2007
- Introductory Unix Workshops: taught for OU Student Chapter of ACM (Fall 1999), for CAPS Research Experience for Undergraduates program (Summer 1999)

## **GRADUATE SUPERVISION**

- Arne Schwettmann, PhD committee (informal), Physics & Astronomy, Fall 2005 - present
- Roman Voronov, PhD committee, Chemical, Biological & Materials Engineering, Summer 2008 - Spring 2010
- Samuel Solomon, graduate independent study, Computer Science, Spring - Summer 2005
- Pankaj Agrawal, graduate independent study, Computer Science, Fall 2003 - Summer 2004
- Suresh Marru, graduate research assistant and MS committee, Center for Analysis & Prediction of Storms and Electrical & Computer Engineering, Jan 2001 - May 2004
- R. Jason Lynn, MS committee, Computer Science, Feb 2001 - May 2002

## UNDERGRADUATE SUPERVISION

- Gregoire Astruc, undergraduate intern, OSCER/University de Clermont-Ferrand, Spring - Summer 2008
- Chris Belgy, undergraduate intern, OSCER/University de Clermont-Ferrand, Spring - Summer 2008
- Gregory Mialon, undergraduate intern, OSCER/University de Clermont-Ferrand, Spring - Summer 2008
- Guillaume Jeandillou, undergraduate intern, OSCER/University de Limoges, Spring - Summer 2008
- Damien Trouillaud, undergraduate intern, OSCER/University de Limoges, Spring - Summer 2008
- Vincent Bialoux, undergraduate intern, OSCER/University de Limoges, Spring - Summer 2007
- Florent Devillechabrol, undergraduate intern, OSCER/University de Limoges, Spring - Summer 2007
- Damien Nestelhut, undergraduate intern, OSCER/University de Clermont-Ferrand, Spring - Summer 2007
- Romain Paris, undergraduate intern, OSCER/University de Clermont-Ferrand, Spring - Summer 2007
- Jean-Baptiste Perez, undergraduate intern, OSCER/University de Clermont-Ferrand, Spring - Summer 2007
- Francois Segaud, undergraduate intern, OSCER/University de Limoges, Spring - Summer 2007
- Arnaud Auroux, undergraduate intern, OSCER/Universite de Clermont-Ferrand, Spring - Summer 2006
- Michael Bessard, undergraduate intern, OSCER/Universite de Clermont-Ferrand, Spring - Summer 2006
- Thomas Chavanis, undergraduate intern, OSCER/Universite de Clermont-Ferrand, Spring - Summer 2006
- Anthony Dubey, undergraduate intern, OSCER/Universite de Clermont-Ferrand, Spring - Summer 2006
- Melanie Garnier, undergraduate intern, OSCER/Universite de Limoges, Spring - Summer 2006
- Anthony Laroulandie, undergraduate intern, OSCER/Universite de Limoges, Spring - Summer 2006
- Simon Le Parc, undergraduate intern, OSCER/Universite de Limoges, Spring - Summer 2006
- Xavier Marguin, undergraduate intern, OSCER/University de Clermont-Ferrand, Spring - Summer 2006
- Florian Masson, undergraduate intern, OSCER/Universite de Clermont-Ferrand, Spring - Summer 2006
- Baptiste Rousset, undergraduate intern, OSCER/Universite de Clermont-Ferrand, Spring - Summer 2006

- Claire Rouveyrol, undergraduate intern, OSCER/Universite de Clermont-Ferrand, Spring - Summer 2006
- Virginie Trottet, undergraduate intern, OSCER/Universite de Clermont-Ferrand, Spring - Summer 2006
- Clement Vayer, undergraduate intern, OSCER/University de Clermont-Ferrand, Spring - Summer 2006
- Xing Wang, undergraduate independent study, Computer Science, Summer 2005
- Jean-Baptiste Diogon, undergraduate intern, OSCER/Universite d'Auvergne, Spring - Summer 2005
- Thibault Pouget, undergraduate intern, OSCER/Universite de Limoges, Spring - Summer 2005
- Guilhem Urroz, undergraduate intern, OSCER/Universite de Limoges, Spring - Summer 2005
- Jason Lacy, undergraduate intern, Library & Information Studies, Spring 2005
- David LaFleur, undergraduate intern, Library & Information Studies, Spring 2005
- Clinton Mosley, undergraduate intern, Library & Information Studies, Fall 2004
- Roy Simon, undergraduate intern, Library & Information Studies, Fall 2003
- Lyal Grissom, undergraduate employee, OSCER, Sep 2001 - Oct 2002
- Dale Simpson, undergraduate employee, Chemical Engineering & Materials Science, Sep 2000 - May 2002
- James Clark, undergraduate employee, Computer Science, June 2001 - Aug 2001
- Joshua Shuller, undergraduate employee, CAPS, Jan 2001 - Aug 2001
- Joseph Garfield, undergraduate employee, CAPS, Sep 1999 - Jan 2001, Jun - Aug 2001
- Kenneth Teague, independent study, CAPS/Computer Science, Spring 1999

## **PUBLICATIONS**

### **Journal Articles**

- P. Moisant, H. Neeman and A. Zlotnick, 2010: "Exploring the Paths of (Virus) Assembly." *Biophysical Journal*, 99 (5), pp. 1350-1357.
- H. Neeman, H. Severini, D. Wu, K. Kantardjieff, 2010: "Teaching High Performance Computing via Videoconferencing." *ACM Inroads*, 1(1), pp. 67-71.
- H. Neeman, H. Severini, D. Wu, 2008: "Supercomputing in Plain English: Teaching Cyberinfrastructure to Computing Novices." *inroads: SIGCSE Bulletin*, 40 (2), 27-30.
- H. Neeman, L. Lee, J. Mullen, G. Newman, 2006: "Analogies for Teaching Parallel Computing to Inexperienced Programmers." *inroads: SIGCSE Bulletin*, 38 (4), 64-67.
- Z. Cui, B.E. Vieux, H. Neeman and F. Moreda, 2005: "Parallelization of a Distributed Hydrologic Model." *International Journal of Computer Applications in Technology*, Special Issue on Applications for High-Performance Systems, 22 (1), 42-52.
- H.-W. Lao, H.J. Neeman and D.V. Papavassiliou, 2004: "A Pore Network Model for the Calculation of Non-Darcy Flow Coefficients in Fluid Flow Through Porous Media." *Chemical Engineering Communications*, 191 (10), 1285-1322.
- W. McCall, O. Plesh, B. Bishop and H. Neeman, 1990: "Analysis of Jaw Movements and Masticatory Muscle Activity." *Computer Methods and Programs in Biomedicine*, 31, 19-32.
- R.L. Neeman, H.J. Neeman and M. Neeman, 1988: "Application of Orthokinetic Orthoses in Habilitation of a Person with Upper Extremity Incoordination Secondary to Spastic Quadriplegia Due to Cerebral Palsy." *Canadian Journal of Rehabilitation*, 1 (3), 145-154.

### **Conference Proceedings**

- A. Fitz Gibbon, P. Gray, D. A. Joiner, T. Murphy, H. Neeman, R. M. Panoff, C. Peck and S. Thompson, 2010: "Teaching High Performance Computing to Undergraduate Faculty and Undergraduate Students." *Proceedings of TeraGrid 2010*. Best Paper: Education, Outreach & Training Track.
- C. C. Kiser, T. A. Handy, E. C. Lemley, D. V. Papavassiliou and H. J. Neeman, 2010: "Reynolds Number Dependence for Laminar Flow Loss Coefficients in Tee and Wye Junctions." *Proceedings of ASME 2010 3rd Joint US-European Fluids Engineering Summer Meeting and 8th International Conference on Nanochannels, Microchannels, and Minichannels (FEDSM2010-ICNMM2010)*, FEDSM-ICNMM2010-31026.
- T. Ashley, D. Wu, R. Watkins, H. Neeman and B. Howard, 2010: "Modeling Tumor Invasion: Assessing Erlang for the Modeling of Molecular/Cellular Dynamics." *Proceedings of Trends in Functional Programming 2010*, paper 27.
- T. Handy, E.C. Lemley, D.V. Papavassiliou and H.J. Neeman, 2009: "Loss Coefficients in Microelbows." *Proceedings of FEDSM2009, ASME Fluids Engineering Division Summer Meeting*, paper FEDSM2009-78517.
- T. Handy, E.C. Lemley, D.V. Papavassiliou and H.J. Neeman, 2009: "Laminar Entrance Length in Microtubes." *Proceedings of FEDSM2009, ASME Fluids Engineering Division Summer Meeting*, paper FEDSM2009-78532.
- H. Severini, H. Neeman, C. Franklin, J. Alexander, and Sumanth J.V., 2008: "Implementing Linux-Enabled Condor in Windows Computer Labs." *Proc. 2008 Nuclear Science Symposium*.
- H. Neeman, H. Severini, D. Wu and K. Kantardjieff, 2008: "Teaching Supercomputing via Videoconferencing." *Proceedings of TeraGrid 2008*. Best Paper: Education, Outreach & Training Track.

## **PUBLICATIONS (continued)**

### **Conference Proceedings (continued)**

- T.A. Handy, E.C. Lemley, D.V. Papavassiliou and H.J. Neeman, 2008: "Simulations to Determine Laminar Loss Coefficients for Flow in Circular Ducts with Arbitrary Planar Bifurcation Geometries." *Proceedings of FEDSM2008, 6th ASME Fluids Engineering Summer Conference*, paper FEDSM2008-55181.
- E.C. Lemley, D.V. Papavassiliou and H.J. Neeman, 2007: "Non-Darcy Flow Pore Network Simulation: Development and Validation of a 3D Model." *Proceedings of FEDSM2007, 5th Joint ASME/JSME Fluids Engineering Conference*, paper FEDSM2007-37278.
- E.C. Lemley, D.V. Papavassiliou and H.J. Neeman, 2007: "Simulations to Determine Laminar Loss Coefficients in Arbitrary Planar Dividing Flow Geometries." *Proceedings of FEDSM2007, 5th Joint ASME/JSME Fluids Engineering Conference*, paper FEDSM2007-37268.
- A.G. Striz, B. Kennedy, Z. Siddique and H. Neeman, 2006: "A Roadmap for Moderate Fidelity Conceptual Design with Multilevel Analysis and MDO." *Proceedings of the 47th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference*, 1 - 4 May 2006, Newport RI, AIAA 2006-1619.
- D. Weber and H. Neeman, 2006: "Experiences in Optimizing a Numerical Weather Prediction Model: An Exercise in Futility?" *Proc. of the 7th LCI International Conference on Clusters: The HPC Revolution 2006*.
- C. Byun, G.P. Guruswamy, A.L. Huizenga, H.J. Neeman, A.G. Striz, 2005: "High Fidelity Dynamic Analysis of Launch Vehicles on Single-Image Supercomputers." *Proc. of the 46th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference*.
- S. Subramaniyam, H.J. Neeman and A.G. Striz, 2004: "Domain Decomposition in Displacement Based Multi-Level Structural Optimization." *Proc. of the 10th AIAA/ISSMO Multidisciplinary Analysis and Optimization Conference*.
- B.A. Houshmand, H.J. Neeman, and A.G. Striz, 2003: "Displacement Based Multilevel Structural Optimization and High Performance Computing." *Proc. of the World Congress of Structural and Multidisciplinary Optimization 5*.
- H. Neeman, J. Mullen, L. Lee and G. Newman, 2002: "Supercomputing in Plain English: Teaching High Performance Computing to Inexperienced Programmers." In *Proc. of the 3<sup>rd</sup> LCI International Conference on Linux Clusters: The HPC Revolution 2002*.
- H.-W. Lao, H. Neeman and D. Papavassiliou, 2001: "Stochastic Estimation of Porous Medium Properties." *Proc. of the 3rd International Conference on Computational Technologies for Fluid/Thermal/Chemical Systems with Industrial Applications*.
- H. Neeman, H.-W. Lao, D. Simpson and D. Papavassiliou, 2001: "Multiscale Characterization of Porous Media Properties for Hydrocarbon Reservoir Simulation." *Proc. of the SPIE Conference on Commercial Applications for High-Performance Computing*.
- H. Neeman, 2000: "HAMR: The Hierarchical Adaptive Mesh Refinement System." In *Structured Adaptive Mesh Refinement (SAMR) Grid Methods*, Baden, S.B., N.P. Chrisochoides, D.B. Gannon and M.L. Norman, eds. New York: Springer-Verlag, 19-51.
- H. Neeman, 1990: "A Decomposition Algorithm for Visualizing Irregular Grids." *Computer Graphics*, 24:5 (*Proc. of the San Diego Workshop on Volume Visualization*), 49-56.
- P. Shirley and H. Neeman, 1989: "Volume Visualization at the Center for Supercomputing Research and Development." *Proc. of the Chapel Hill Workshop on Volume Visualization*, 17-20.

## **PUBLICATIONS (continued)**

### **Conference Proceeding Abstracts**

- D.V. Papavassiliou, and H. Neeman, 2003: "Prediction of Formation Properties and Uncertainty with Pore Network Modeling." *7th US National Congress on Computational Mechanics*.
- V. Ramasubramanian, H.-W. Lao, D. Simpson, H. Neeman, M. Zaman and D.V. Papavassiliou, 2001: "Multiscale Simulation of Flow Through Porous Media with High Performance Computing." *American Institute of Chemical Engineers Annual Conference*, paper 288d.
- H.-W. Lao, H.J. Neeman and D.V. Papavassiliou, 2002: "Stochastic Prediction of the Permeability Versus Non-Darcy Coefficient Correlation in a Porous Material." *American Institute of Chemical Engineers Annual Conference*, paper 69g.
- H.-W. Lao, H.J. Neeman and D.V. Papavassiliou, 2002: "Prediction of Non-Darcy Flow Coefficients Using Pore Network Modeling." *14th U.S. National Congress on Theoretical and Applied Mechanics (14th USNCTAM)*.
- H.-W. Lao, H.J. Neeman and D.V. Papavassiliou, 2001: "Prediction of Porous Media Properties with a Random Pipe Network." *American Institute of Chemical Engineers Annual Conference*, Reno, November. paper 183b.
- V. Ramasubramanian, H.-W. Lao, D. Simpson, H. Neeman and D. Papavassiliou, 2001: "Development of a Multiscale Simulator for Flow Through Porous Formations." *Proceedings of the 6th United States Congress on Computational Geomechanics, Symposium on Geotechnical Applications*.

### **Dissertation & Thesis**

- H. Neeman, 1996: *Autonomous Hierarchical Adaptive Mesh Refinement for Multiscale Simulations*. Ph.D. dissertation, University of Illinois at Urbana-Champaign. Michael L. Norman and Michael Heath, advisors.
- H. Neeman, 1990: *Visualization Techniques for Three Dimensional Flow Fields*. M.S. thesis, University of Illinois at Urbana-Champaign. Dennis Gannon and Donald Hearn, advisors.

### **Technical Reports**

- H.-W. Lao, H. Neeman and D. V. Papavassiliou, 2001: "Development of a Random Pore Network Simulaton for the Estimation of Reservoir Rock Properties, Part I: The Two-Dimensional Case." *Rock Mechanics Institute Research Memorandum Number IAP/III-01-01*, University of Oklahoma.
- H. Neeman and A. Tuchman, 1989: "Simulation Time Animation System." *Center for Supercomputing Research and Development Technical Report 859*.

### **Book Review**

- T. Murphy and H. Neeman, 2003: "1089 and All That: A Journey into Mathematics." *Read This! The MAA Online Book Review*, Mathematical Association of America, <http://www.maa.org/reviews/1089.html>

## **PROFESSIONAL ACTIVITIES**

### **Conference Activities**

Education Chair, The International Conference for High Performance Computing, Networking, Storage, and Analysis (SC11), Seattle WA

Education Deputy Chair, The International Conference for High Performance Computing, Networking, Storage, and Analysis (SC10), New Orleans LA

Program Chair, Oklahoma Supercomputing Symposium 2010, Norman OK

<http://symposium2010.oscer.ou.edu/>

Awards Chair, 11<sup>th</sup> LCI International Conference on High-Performance Clustered Computing, 2010, Pittsburgh PA

<http://www.linuxclustersinstitute.org/conferences/>

Education Committee member, workshops co-chair, SC09 Education Program, Portland OR

<http://sc09.sc-education.org/>

Program Chair, Oklahoma Supercomputing Symposium 2009, Norman OK

<http://symposium2009.oscer.ou.edu/>

Technical Presentations and Technical Briefs Chair, 10<sup>th</sup> LCI International Conference on High-Performance Clustered Computing, 2009, Boulder CO

<http://www.linuxclustersinstitute.org/conferences/>

Education Committee member, SC08 Education Program, Austin TX

<http://sc08.supercomputing.org/?pg=education.html>

Program Chair, Oklahoma Supercomputing Symposium 2008, Norman OK

<http://symposium2008.oscer.ou.edu/>

Planning Committee member, Great Plains Network Annual Meeting 2008

[http://collaboration.greatplains.net/wiki/index.php/Annual\\_Meeting:2008](http://collaboration.greatplains.net/wiki/index.php/Annual_Meeting:2008)

Program Committee member, 9<sup>th</sup> LCI International Conference on High-Performance Clustered Computing, 2008, Urbana IL

<http://www.linuxclustersinstitute.org/conferences/>

Education Committee member, SC07 Education Program, Reno NV

<http://sc07.supercomputing.org/?pg=education.html>

Program Chair, Oklahoma Supercomputing Symposium 2007, Norman OK

<http://symposium2007.oscer.ou.edu/>

Technical Presentations Chair, 8<sup>th</sup> LCI International Conference on High-Performance Clustered Computing, 2007, South Lake Tahoe CA

Program Chair, Oklahoma Supercomputing Symposium 2006, Norman OK

<http://symposium2006.oscer.ou.edu/>

Conference Chair, 7<sup>th</sup> LCI International Conference on Linux Clusters: The HPC Revolution 2006, Norman OK

Mini-Symposium Organizer, SIAM Conference on Parallel Processing for Scientific Computing 2006, MS-55 "High Performance Parallel and Cluster Computing Education," San Francisco

<http://www.siam.org/meetings/pp06/>

Program Chair, Oklahoma Supercomputing Symposium 2005, Norman OK

<http://symposium2005.oscer.ou.edu/>

Program Committee & Steering Committee, 6<sup>th</sup> LCI International Conference on Linux Clusters: The HPC Revolution 2005, Chapel Hill NC

## **PROFESSIONAL ACTIVITIES (continued)**

### **Conference Activities (continued)**

Program Committee, Collaborative and Learning Applications of Grid Technology and Grid Education (CLAG + Grid.edu) 2005 (part of CCGrid2005), Cardiff UK

<http://research.ac.upc.es/clag/clag2005.htm>

Mini-Symposium Co-organizer with J. Mullen, SIAM Conference on Computational Science & Engineering 2005, MS-30 “High End Computational Science Education,” Orlando FL

<http://www.siam.org/meetings/cse05/>

Program Chair, Oklahoma Supercomputing Symposium 2004, Norman OK

<http://symposium2004.oscer.ou.edu/>

Program Committee, 6<sup>th</sup> LCI International Conference on Linux Clusters: The HPC Revolution 2004, Austin TX

<http://www.linuxclustersinstitute.org/Linux-HPC-Revolution/>

Program Committee, Grid.Edu 2004 (part of CCGrid2004), Chicago IL

<http://csce.uark.edu/~aapon/grid.edu2004/>

Program Chair, Oklahoma Supercomputing Symposium 2003, Norman OK

<http://www.oscer.ou.edu/Symposium2003/>

Program Committee, ClusterWorld Conference & Expo 2003, San Jose CA

<http://www.clusterworld.com/>

Program Chair, OU Supercomputing Symposium 2002, Norman OK

[http://www.oscer.ou.edu/symposium2002\\_schedule.html](http://www.oscer.ou.edu/symposium2002_schedule.html)

### **Professional Organization Memberships**

Association for Computing Machinery

IEEE Computer Society

Society for Industrial & Applied Mathematics

### **Proposal Reviewing**

National Science Foundation Review Panels: spring 2004, spring 2005, spring 2005 (electronic), fall 2005, spring 2007, fall 2007, spring 2008, spring 2009

AAAS Michigan Review Panel, spring 2006

### **HONORS & AWARDS**

HPCwire.com “People to Watch 2006”