

**Richard M. Wolski**  
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University of California, Santa Barbara  
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### Vita

Birthdate: August 17, 1964  
Birthplace: Walnut Creek, California  
Citizenship: United States

### Education

Ph.D.	U.C. Davis/Lawrence Livermore Campus	April, 1994
M.S.	U.C. Davis/Lawrence Livermore Campus	June, 1989
B.S.	California Polytechnic University, San Luis Obispo (Summa Cum Laude)	August, 1986

### Research Interests

My research interests center around distributed computing systems with a particular emphasis on high-performance computing using networked resources. My previous work focused on metacomputing, parallel compilers and distributed operating systems at both the University of California, San Diego and Lawrence Livermore National Laboratory. Currently, at the University of California, Santa Barbara I am investigating Computational Grids as an amalgam of these disciplines capable of supporting large-scale, robust, and high-performance computing capabilities.

### Professional Experience

July, 2002 - present	Associate Professor	U.C. Santa Barbara
July, 2001 - present	Grid Systems Lead	NSF National Partnership for Advanced Computational Infrastructure (initial partner)
July, 2001 - July, 2002	Assistant Professor	U.C. Santa Barbara
October, 2001 - present	Faculty Computer Scientist	Lawrence Berkeley Lab
February, 1999 - June, 2001	Assistant Professor	University of Tennessee
June, 1996 - February, 1999	Research Faculty	U.C. San Diego
April, 1994 - June, 1996	Postdoctoral Researcher	U.C. San Diego
April, 1994 - January, 1997	SDSC Junior Fellow	San Diego Supercomputer Center
September, 1986 - June, 1996	Computer Scientist	Lawrence Livermore Laboratory
September, 1993 - December, 1993	Lecturer	Mills College, Oakland CA.

## Awards

- Computer Science Teacher of the Year, University of California, Santa Barbara, Computer Science Department, June, 2003.
- ACM Teacher of the Year award, Computer Science Department, University of Tennessee, Knoxville, TN., May 2000.
- Best Acceleration for “Where do you want to Compute Today?” at the High-performance Computing Challenge, SC98, Orlando FL, November 1998.

## Published Work

1. Chrabakh, W. and Wolski, R., GridSAT: A Chaff-based Distributed SAT Solver for the Grid, Proceedings of SC03, Phoenix, AZ, November, 2003 (published electronically).
2. Allen, M. and Wolski, R., The Livny and Plank-Beck Problems: Studies in Data Movement on the Computational Grid, Proceedings of SC03, Phoenix, AZ, November, 2003 (published electronically).
3. Wolski, R., Miller, L., Oberletti, G., and Swany, M., Performance Information Services for Computational Grids, In *Resource Management for Grid Computing*, Nabrzyski, J., Schopf, J., and Weglarz, J., editors, Kluwer Publishers, Fall, 2003.
4. Swany, M. and Wolski, R., Building Performance Topologies for Computational Grids, *to appear* International Journal of High Performance Computing Applications, Fall, 2003.
5. Berman, F., Wolski, R., Casanova, H., Cirne, W, Dail, H., Faerman, M., Figueira, S., Hayes, J., Obertelli, G., Schopf, J., and Shao, G., Smallen, S., Spring, N., Su, A., Zagorodnov, D., Adaptive Computing on the Grid Using AppLeS, IEEE Transactions on Parallel and Distributed Systems, Volume 14, Number 4, pp 369–382, April, 2003.
6. Bassi, A., Beck, M., Moore, T., Plank, S., Swany, M., Wolski, R., and Fagg, G., The Internet Backplane Protocol: a study in Resource Sharing, Future Generation Computer Systems, Volume 19, Number 4, pp 551–561, 2003.
7. Wolski, R., Experiences with Predicting Resource Performance On-line in Computational Grid Settings, ACM SIGMETRICS Performance Evaluation Review, Volume 30, Number 4, pp 41–49, March, 2003.
8. Wolski, R., Brevik, J., Plank, J., and Bryan, T., Grid Resource Allocation and Control Using Computational Economies, In *Grid Computing: Making the Global Infrastructure a Reality*, Berman, F, Fox, G., and Hey, T. editors, Wiley and Sons, pp. 747–772, March 2003.
9. Swany, M. and Wolski, R., Multivariate Resource Performance Forecasting in the Network Weather Service, Proceedings of SC02, November, 2002.

10. Swany, M. and Wolski, R., Building Performance Topologies for Computational Grids, Proceedings of the Los Alamos Computer Science Institute Third Annual Symposium, October, 2002.
11. Allen, M., Wolski, R. and Plank, J., Adaptive Timeout Discovery Using the Network Weather Service, Proceedings of the 11th IEEE Symposium on High-Performance Distributed Computing (HPDC-11), August, 2002.
12. Swany, M., and Wolski, R., Representing Dynamic Performance Information in Grid Environments with the Network Weather Service, in the Proceedings of the Second Conference on Cluster and Grid Computing (CCGrid02), May, 2002.
13. Kennedy, K., Mazina, M., Mellor-Crummy, J., Cooper, K., Torczon, L., Berman, F., Chien, A., Dail, H., Sievert, O., Anguloa, D., Forster, I., Gannon, D., Johnsson, L., Kesselman, C., Ayt, R., Reed, D., Dongarra, J., Vadhiyar, S., Wolski, R., Toward a Framework for Preparing and Executing Adaptive Grid Programs, Proceedings of NSF Next Generation Systems Program Workshop (International Parallel and Distributed Processing Symposium 2002), April, 2002.
14. Wolski, R., Computational Grids: Current Trends in Performance-oriented Distributed Computing, SIAM News, Volume 35, Number 2, page 4, March 2002.
15. Bassi, A., Beck, M., Fagg, G., Moore, T., Plank, J., Swany, M., and Wolski, R., The Internet Backplane Protocol: A Study in Resource Sharing, in the Proceeding of the Second Conference on Cluster and Grid Computing (CCGrid02), May, 2002.
16. Swany, D. M., Wolski, R., Data Logistics in Network Computing: The Logistical Session Layer, Proceedings of IEEE International Symposium on Network Computing Applications, February, 2002.
17. Plank, J., Wolski, R. and Allen, M., The Effect of Timeout Prediction and Selection on Wide Area Collective Operations, Proceedings of IEEE International Symposium on Network Computing Applications, February, 2002.
18. Wolski, R., Brevik, J., Obertelli, G., Spring, N., and Su, A., Writing Programs that Run EveryWare on the Computational Grid, IEEE Transactions on Parallel and Distributed, Vol. 12, Number 10, pp. 1066–1080, October, 2001.
19. The GrADS Project: Software Support for High-Level Grid Application Development, Berman, F., Chien, A., Cooper, K., Dongarra, J., Foster, I., Gannon, D., Johnsson, L., Kennedy, K., Kesselman, C., Mellor-Crummey, J., Reed, D., Torczon, L., Wolski, R., International Journal of High Performance Computing Applications, Volume 15, Number 4, pp. 327–344, Winter 2001.
20. Wolski, R., Plank, S., Bryan, T., and Brevik, J., Analyzing Market-based Resource Allocation Strategies for the Computational Grid, International Journal of High-performance Computing Applications, Volume 15, Number 3, pp. 258–281, Fall 2001.

21. Plank, J., Bassi, A., Beck, M., Moore, T., Swany, D. M., R. Wolski, Managing Data Storage in the Network, IEEE Internet Computing, Vol. 5, Number 5, pp. 50–58, Sept/Oct., 2001.
22. Swany, D., and Wolski, R., The Logistical Session Layer, IEEE International Symposium on High Performance Distributed Computing, August, 2001.
23. Krintz, C., and Wolski, R., NwsAlarm: A Tool for Accurately Detecting Degradation in Expected Performance of Grid Resources, CCGrid 2001, May, 2001.
24. Elwasif, W., Plank, J., and Wolski, R., Data Staging Effects in Wide Area Task Farming Applications, CCGrid 2001, May, 2001.
25. Wolski, R., Plank, J., Brevik, J., and Bryan, T., G-Commerce: Market Formulations Controlling Resource Allocation on the Computational Grid, IPDPS 01, March, 2001.
26. Krintz, C., and Wolski, R., Using JavaNws to Compare C and Java TCP-socket Performance, The Journal of Concurrency and Computation: Practice and Experience, Volume 13, Number, 8-9, pp. 815–839, 2001.
27. F. Berman, R. Wolski, The AppLeS Project: Harvesting the Grid, Newsletter of the IEEE Technical Committee on Distributed Processing, 2000.
28. Wolski, R., Spring, N. and Hayes, J., Predicting the CPU Availability of Time-shared Unix Systems on the Computational Grid, The Journal of Cluster Computing, December, Vol. 3, No. 4 (2000), pp. 293 – 301.
29. Casanova, H., Obertelli, G., Berman, F., and Wolski, R., The AppLeS Parameter Sweep Template: User-Level Middleware, *Proceedings of SC00*, November, 2000, (best paper finalist).
30. Gaidioz, B., Wolski, R., and Tourancheau, B., Synchronizing Network Probes to avoid Measurement Intrusiveness with the Network Weather Service, The 9th IEEE High-performance Distributed Computing Conference, August, 2000, pp. 147-154.
31. Krintz, C. and Wolski, R., JavaNws: The Network Weather Service for the Desktop, Proceedings of ACM JavaGrande, June, 2000.
32. Dail, H., Obertelli, G., Berman, F., and Wolski, R., Application-Aware Scheduling of a Magnetohydrodynamics Application in the Legion Metasystem, 2000 Heterogeneous Computing Workshop at IPDPS, May, 2000.
33. Shao, G., Berman, F., and Wolski, R., Master/Slave Computing on the Grid, 2000 Heterogeneous Computing Workshop at IPDPS, May, 2000.

34. Smallen, S., Cirne, W., Frey, J., Berman, F., Wolski, R., Mei-Hui, S., Kesselman, C., Young, S., and Ellisman, M., Combining Workstations and Supercomputers to Support Grid Applications: The Parallel Tomography Experience, 2000 Heterogeneous Computing Workshop at IPDPS, May, 2000.
35. Wolski, R., Brevik, J., Krintz, C., Obertelli, G., Spring, N., and Su, A., Running EveryWare on the Computational Grid, *Proceedings of SC99*, November, 1999.
36. Faerman, M., Su, A., Wolski, R., and Berman, F., Adaptive Performance Prediction for Distributed Data-Intensive Applications, *Proceedings of SC99*, November, 1999.
37. Lee, C., Stepanek, J., Wolski, R., Kesselman, C., and Foster, I., A Network Performance Tool for Grid Environments, *Proceedings of SC99*, November, 1999.
38. J. Plank, M. Beck, W. Elwasif, T. Moore, M. Swany, and R. Wolski, The Internet Backplane Protocol: Storage in the Network, *Proceedings of NetStore 99: Network Storage Symposium*, October, 1999.
39. W. Elwasif, J. Plank, M. Beck, and R. Wolski, IBP-Mail: Controlled Delivery of Large Mail Files, *Proceedings of NetStore 99: Network Storage Symposium*, October, 1999.
40. M. Beck, H. Casanova, J. Dongarra, T. Moore, J. Plank, F. Berman, and R. Wolski, Logistical Quality of Service in NetSolve, *Computer Communications*, Vol. 22, No. 11, July, 1999, pp. 1034 – 1044.
41. Wolski, R., Spring, N. and Hayes, J., The Network Weather Service: a Distributed resource Performance Forecasting Service for Metacomputing, *Journal of Future Generation Computing Systems*, Volume 15, Numbers 5-6, pp. 757-768, October, 1999.
42. Wolski, R., Predicting CPU Availability on the Computational Grid using the Network Weather Service, *Journal of Parallel Processing Letters*, Volume 9, No. 4, pp. 227-241, 1999.
43. Su, A., Berman, F. Wolski, R., and Mills Strout, M., Using AppLeS to Schedule a Distributed Visualization Tool on the Computational Grid, *International Journal of Supercomputer and High-Performance Applications*, Volume 13, No. 3, pp. 253-262, Fall 1999.
44. Wolski, R., Spring, N. and Hayes, J., Predicting the CPU Availability of Time-shared Unix Systems on the Computational Grid, *Proceedings of 8th High-performance Distributed Computing Systems Conference*, August, 1999.
45. Shao, G., Berman, F., and Wolski, R., Using Effective Network Views to Promote Distributed Application Performance, *Proceedings of the 1999 International Conference on Parallel and Distributed Processing Techniques and Applications*, July, 1999.

46. Spring, N. and Wolski, R., Application Level Scheduling of Gene Sequence Comparison on Metacomputers, *Proceedings of the 12th ACM International Conference on Supercomputing*, Melbourne, Australia, July, 1998.
47. Wolski, R. Dynamically Forecasting Network Performance using the Network Weather Service, in *Journal of Cluster Computing*, Volume 1, pp. 119-132, January, 1998.
48. Wolski, R.M., Spring, N., Peterson, C., Implementing a Performance Forecasting System for Metacomputing: The Network Weather Service, *Proceedings of SC97*, November, 1997.
49. Wolski, R.M., Forecasting Network Performance to Support Dynamic Scheduling Using the Network Weather Service, *Proceedings of the Sixth High-performance Distributed Systems Conference*, August, 1997, pp. 316-325.
50. Berman, F., and Wolski, R., The AppLeS Project: A Status Report, *Proceedings of the 8th NEC Research Symposium*, Berlin, Germany, May 1997.
51. Shao, G., Wolski, R., and Berman, F., Modeling the Cost of Redistribution in Scheduling, in *Proceedings of the SIAM conference on Parallel Processing*, March, 1997.
52. Berman F. Wolski, R.M., Figueira, S., Schopf, J., and Shao, G., Application-Level Scheduling on Distributed Heterogeneous Networks, *Proceedings of Supercomputing 1996*, November, 1996.
53. Berman F. and Wolski, R.M., Scheduling from the Perspective of the Application [invited paper], *Proceedings of the 1996 High-Performance Distributed Computing Conference*, August, 1996.
54. W. G. Griswold, R. Wolski, S. B. Baden, S. J. Fink, S. R. Kohn, Programming Language Requirements for the Next Millennium, *ACM Computing Surveys*, Volume 28, No. 4, pp. 194-196, December, 1996.
55. Wolski, R.M., Cann, D, Compiler Controlled Cache Coherence Using a Functional Language, the *The Journal of Scientific Programming*, Volume 5, 1996.
56. Wolski, R.M., Static Scheduling of Hierarchical Program Graphs, *Journal of Parallel Processing Letters*, Volume 5, Number 4, pp. 611-622, December, 1995.
57. Gorda, B. and Wolski, R.M., Time Sharing Massively Parallel Machines, *Proceedings of the International Conference on Parallel Processing*, August, 1995.
58. Wolski, R.M., Anglano, C, Schopf, J., Berman, F., Developing Heterogeneous Applications Using Zoom and HeNCE, the *Proceedings of the Heterogeneous Processing Workshop, International Parallel Processing Symposium*, Santa Barbara, CA, April, 1995.

59. Wolski, R.M., Cann, D, Compiler Controlled Cache Coherence Using a Functional Language, *Proceedings of the Conference on High-performance Functional Computing*, Denver, CO, April, 1995.
60. Wolski, R.M., Feo, J.T., Program Partitioning for NUMA Multiprocessor Computer Systems, *The Journal of Parallel and Distributed Computing*, Volume 19, No. 3, pp. 203-218, November, 1993.
61. Wolski, R.M., Feo, J.T., Overlapping Computations and Communications on NUMA Architectures, *Proceedings of the Third Annual Sisal Users' Conference*, San Diego, CA, October, 1993.
62. Wolski, R.M., Feo, J.T., Program Partitioning for NUMA Architectures, *Proceedings of the Second Annual Sisal Users' Conference*, San Diego, CA, October, 1992.
63. Wolski, R.M., Feo, J.T., and Cann, D. A Prototype Functional Language Implementation for Hierarchical-Memory Architectures, *Proceedings of the 25th Annual Hawaii International Conference on System Sciences*, Kauai, Hawaii, January, 1992.
64. Cann, D., Wolski, R.M., Feo, J.T., Toward Resolving the Parallel Programming Crisis, *Proceedings of the 1992 International Parallel Processing Symposium Parallel Systems Fair*, Beverly Hills, CA, March, 1992.

### **Technical Reports**

1. Brevik, J., Nurmi, D., and Wolski, R. Quantifying Machine Availability in Networked and Desktop Grid Systems, University of California, Santa Barbara Computer Science Technical Report Number 2003-37, November, 2003
2. Nurmi, D., Brevik, J., and Wolski, R. Modeling Machine Availability in Enterprise and Wide-area Distributed Computing Environments, University of California, Santa Barbara Computer Science Technical Report Number 2003-28, October, 2003
3. Chrabakh, W. and Wolski, R., GrADSAT: A Parallel SAT Solver for the Grid, University of California, Santa Barbara Computer Science Technical Report Number 2003-05, February, 2003.
4. Swany, M., and Wolski, R., Improving Throughput with Cascaded TCP Connections: the Logistical Session Layer, University of California, Santa Barbara Computer Science Technical Report Number 2002-24, October, 2002.
5. Wen, Y., Krintz, C. and Wolski, R., Predicting Program Power Consumption, University of California, Santa Barbara Computer Science Technical Report Number 2002-20, July, 2002.

6. Wolski, R., Krintz, C., and Wen, Y., Application-level Prediction of Program Power Dissipation, University of California, Santa Barbara Computer Science Technical Report Number 2002-10, February, 2002.
7. Wolski, R., Plank, J., Brevik, J., and Bryan, T., G-Commerce: Analyzing Market-based Resource Allocation Strategies for the Computational Grid, University of Tennessee Technical Report Number CS-00-453, December, 2000.
8. Wolski, R., Plank, J., Brevik, J., and Bryan, T., G-Commerce: Market Formulations Controlling Resource Allocation on the Computational Grid, University of Tennessee Technical Report Number CS-00-450, October, 2000.
9. Wolski, R., Plank, and J., Brevik, G-Commerce – Building Computational Marketplaces for the Computational Grid, University of Tennessee Technical Report Number CS-00-439, October, 2000.
10. Wolski, R., Brevik, J., Krintz, C., Obertelli, G., Spring, N., and Su, A., Writing Programs that Run EveryWare on the Computational Grid, University of Tennessee Technical Report UT-CS-99-420, April, 1999.
11. Wolski, R. Dynamically Forecasting Network Performance using the Network Weather Service, UCSD Technical Report TR-CS96-494, October, 1996.
12. Anglano, C, Schopf, J., Wolski, R., Berman, F., Zoom: A Hierarchical Representation for Heterogeneous Applications, U.C. San Diego Tech. Report No. CS95-451, October, 1995.
13. Wolski, R., Cann, D. Cache-line Based Loop Partitioning to Eliminate False Sharing, U.C. San Diego Tech. Report No. CS95-452, October, 1995.
14. Wolski, R.M., Program Partitioning and Scheduling for NUMA Computer Architectures, Ph.D. Thesis, U.C. Davis, Lawrence Livermore National Laboratory Publication No. UCRL-LR-117760, March, 1994.
15. Wolski, R.M., Feo, J.T., *Implementing Functional Languages to Exploit Locality*, Technical Report UCRL-JC-109744, Lawrence Livermore National Laboratory, Livermore, CA, June, 1991.
16. Cann, D., Wolski, R.M., Feo, J.T., *Parallel Functional Computation: Current Results and Observations*, Technical Report UCRL-JC- 107022, Lawrence Livermore National Laboratory, Livermore, CA, March, 1991.

### **Invited Professional Talks**

Invited panelist, “Open Issues in Grid Computing,” GlobusWorld, January, 2003  
Keynote speaker at PACT 2002, Charlottesville, VA, October, 2002

APART-01 Workshop on On-line Performance Analysis, SC01, November, 2001  
SC00 Tutorial Presentation on the Network Weather Service, November, 2000.  
Grid Forum 5 invited presentation, October, 2000.  
Keynote speaker at ASCI'00, Lommel, Belgium, June, 2000.  
Beta Grids invited speaker, March, 2000.  
SIAM mini-symposium and Network-Aware Servers, May, 1999.  
Blackberry Farm Conference on Grid Computing, October, 1998.  
Invited panelist SC98 Next Generation Computing Systems, November, 1998.  
Invited speaker DARPA Performance Engineering Meeting, November, 1997.  
Invited panelist at the *ACM International Conference on Supercomputing*, panel on New Directions in Metacomputing, Philadelphia, PA, May, 1996.  
Invited participant at the *Second Pasadena Inter-Agency Workshop on System Software and Tools for High-Performance Computing Environments*, Pasadena, CA, January 1995.  
Co-organizer of *Mapping Programs to Massively Parallel Computer Systems*, Supercomputing '92, Minneapolis, MN, November 1992.

### **Invited Seminar Talks**

IBM Hawthorne Research Seminar, December, 1999  
Colby College Research Colloquium, September, 1999  
Northwestern University Computer Science Research Colloquium, October, 1999  
UCSD Computer Science Research Seminar, December, 1999  
UCSD Computer Science Research Seminar, February, 1998  
Harvey Mudd University Engineering Research Series, May 1997  
USC Information Sciences Institute Seminar, March, 1997  
Argonne National Laboratory Research Colloquium, May, 1996  
Computer Science Research Colloquium, UCSB, March, 1995  
Computer Science Research Seminar, Dipartimento di Informatica, Università di Torino, September, 1994  
Parallel Computing Seminar, USC, April, 1994  
Mills College ICS Colloquium, February and October, 1993  
Computer Science Seminar, Harvey Mudd College, April, 1993  
Parallel Computing Seminar, USC, April, 1993  
Parallel Computing Seminar, UCSD, August, 1992  
Apple Computer Research Colloquium, February, 1992

### **Grants**

Models to Support Performance Engineering of Global Computations, NSF Next Generation Software program (NGS-0305390), Rich Wolski, PI, FY04 - FY07.  
Orchestrated Modeling, Analysis, and Composition Strategies for Resource Management in Embedded Systems, Vision of Ubiquitous Computing, NSF Information Technology Re-

search (ITR) Program (EHS-0209195), FY02 - FY05, Michael Franz, PI, Richard Wolski (and others), Co-PI.

Developing a Resource Aware Adaptive Compilation System for High Performance Distributed Computing Next Generation Software Systems Program, (NGS-0204019), FY02 – FY05, Richard Wolski, PI.

Developing Performance Monitoring and Analysis Middleware Based on the Network Weather Service, NSF Middleware Infrastructure Research program (ANR 0213911), FY01 – FY04, Richard Wolski, PI.

Optimizing Performance and Enhancing Functionality of Distributed Applications using Logistical Networking, DOE SciDAC FY01 – FY04, Micah Beck, PI, Richard Wolski (and others) Co-PI.

Effective Grid Programming with EveryWare and G-commerce, NSF CAREER award (0093166), FY01 - FY06, Richard Wolski, PI.

University of Tennessee Center for Information Technology Research (CITR), Co-founder, FY-01 - FY06.

National Partnership for Advanced Computational Infrastructure, Metasystems Partner, FY-96 - present

NASA Information Power Grid infrastructure partner, FY-98 - FY-02

A Research Testbed for Services Based on Logistical Networking, NSF Advanced Network Infrastructure program (ANI-9980203), FY00 – FY03, Micah Beck, PI, Richard Wolski (and others) Co-PI.

Virtual Instruments: Scalable Software Instruments for the Grid, NSF Information Technology Research (ITR) Program (ACI-0086092), FY00 - FY02, Francine Berman, PI, Richard Wolski (and others), Co-PI.

Deploying the NWS on the Information Power Grid, NASA IPG program, FY00 - FY01, Richard Wolski, PI.

Deploying the NWS on the Information Power Grid, NASA IPG program, FY99 - FY00, Richard Wolski, PI.

Grid Application Development Software, NSF Next Generation Software program (EIA-9975020), FY99 - FY02, Ken Kennedy, PI, Richard Wolski (and others), Co-PI.

Optimizing distributed Application Performance using Logistical Networking, DOE Next Generation Internet program, FY99 - FY00, Jack Dongarra, PI, Richard Wolski, James

Plank, Micah Beck, Co-PIs.

Logistical QoS through Application-driven Scheduling of Remote Storage, NSF Next Generation Software program (EIA-9975015), FY99 - FY02, J. Plank, PI, Richard Wolski (and others), Co-PI.

Application-Level Scheduling with AppLeS, NSF New Technologies program (ACI-9701333), FY97 - FY00, Francine Berman, PI, Richard Wolski, Co-PI.

Performance Prediction Engineering for Metacomputing, DARPA ITO BAA 97-12, FY97 - FY00, Francine Berman, PI, Richard Wolski, Co-PI.

Mapping Parallel Programs to NUMA Architectures Institutional Research and Development Program, Lawrence Livermore National Laboratory, FY91 - FY92, (with J.T. Feo and D.C. Cann).

### **Courses Taught**

Unix Internals (University of Tennessee), Fall 2000

Systems Programming (University of Tennessee), Spring 2000

Distributed Operating Systems (University of Tennessee), Summer 1999

Grid Computing (University of Tennessee), Fall 1999

High-performance Computer Architectures (Mills College), Fall 1993

C and Unix Programming (Mills College), Fall 1993

High-performance Distributed Computing (with C. Krintz at U.C Santa Barbara), Fall 2001.

### **Professional Activities**

Partner in the *National Partnership for Advanced Computational Infrastructure (NPACI)*. Principle architect of the Network Weather Service (<http://nws.npaci.edu>) which is being used to monitor and forecast network conditions across the NSF vBNS sites and the general Internet.

Program committee member for *SC00*, November 2000.

Program committee member for *9th IEEE High-performance and Distributed Computing (HPDC9)*, August 2000.

Program committee member for *SC99*, November 1999.

Program committee member for *IEEE International Parallel Processing Symposium*, November 1999.

Program committee member for *8th IEEE High-performance and Distributed Computing (HPDC8)*, August 1999.

Program committee member for *1999 IEEE Workshop on Internet Applications*, March 1999.

Program committee member for *ACM International Conference on Supercomputing*, July 1998.

Program committee member for the *1996 Heterogeneous Computing Workshop*, April 1996.

Technical Referee:

IEEE Transactions on Computer Systems  
IEEE Transactions on Parallel and Distributed Systems  
Journal of Parallel and Distributed Computing  
Supercomputing  
International Conference High-performance Distributed Computing  
International Conference on Parallel and Distributed Systems  
International Conference on Supercomputing  
International Conference on Parallel Processing  
International Conference on Computer Architecture  
International Parallel Processing Symposium  
Frontiers of Massively Parallel Computing  
International Conference on Distributed Computing