

Geoffrey Charles Fox



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Date of Birth: June 7 1944 Dunfermline Scotland

Education:

B.A. in Mathematics from Cambridge Univ., Cambridge, England (1961-1964)

Ph.D. in Theoretical Physics from Cambridge University (1964-1967)

M.A. from Cambridge University (1968)

Professional Experience:

2009- Director Digital Science Center of Pervasive Technology Institute
2008- Chair Department of Informatics, Indiana University Bloomington
July 2006- Vice President of eScience function for Open Grid Forum
2006- Senior Research Associate in the Center for Computational Science and
Advanced Distributed Simulation at University of Houston Downtown
2005- Visiting Scholar for Cyberinfrastructure Development at the Alliance for Equity
in Higher Education
2004- Visiting Professor of Computer Science at Southampton University UK
2001- Professor of Computer Science, Informatics, Physics. Indiana University
2001- Director of Community Grid Laboratory; Pervasive Technology Laboratories at
Indiana University
2000-2001 Professor of Computer Science, Florida State University
2000-2001 Associate Director of School of Computational Science and Information
Technology FSU
2000-2001 Director of the Computational and Information Science Laboratory FSU
2000-2001 Chief Technologist of Office of Distributed and Distance Learning, FSU
1999- Distinguished Visiting Scientist, JPL Pasadena CA
1990-2002 Professor of Computer Science, Syracuse University
1990-2002 Professor of Physics, Syracuse University
1990-2004 Adjunct Professor, Computer Science, Rice University
1990-2000 Director of Northeast Parallel Architectures Center, Syracuse University
1979-1990 Professor of Physics, California Inst. of Tech.
1986-1988 Associate Provost for Computing, California Inst. of Tech.
1983-1985 Dean for Educational Computing, California Inst. of Tech.
1981-1983 Executive Officer of Physics, California Inst. of Tech.

1974-1979 Associate Professor of Physics, California Inst. of Tech.
1971-1974 Assistant Professor of Physics, California Inst. of Tech.
1970-1971 Millikan Research Fellow in Theoretical Physics, Caltech
1970 Visiting Scientist, Brookhaven National Laboratory, Long Island
1969-1970 Research Fellow at Peterhouse College, Cavendish Lab., Cambridge
1968-1969 Research Scientist, Lawrence Berkeley Lab., Berkeley, Calif.
1967-1968 Member of School of Natural Science, Inst. for Advanced Study, Princeton, New Jersey

Awards and Honors

Senior Wrangler, Part III Mathematics, Cambridge (1964)
[[http://en.wikipedia.org/wiki/Wrangler_\(University_of_Cambridge\)](http://en.wikipedia.org/wiki/Wrangler_(University_of_Cambridge))]
Mayhew Prize, Applied Mathematics, Cambridge (1964)
[http://en.wikipedia.org/wiki/Mayhew_Prize]
Alfred P. Sloan Foundation Fellowship (1973-75)
Fellow of the American Physical Society (1990-)

Board Membership

Anabas Corporation 2001-
Undergroundfilm.org 2003-2007

Current Journal Editor:

1. Main Editor, *Concurrency and Computation: Practice and Experience*, John Wiley, Inc. (1989-present) <http://www.cc-pe.net/>
2. Member of Editorial board: *The Journal of Supercomputing* (1987-)
3. Member of Editorial board: *Future Generation Computer Systems* (2003-)
4. Member of Editorial board: *Computing in Science and Engineering* (2001-)
5. Member of Editorial board: *International Transactions on Systems Science and Applications* (2006-)

Previous Journal Responsibility

1. Supervisory Editor: *Nuclear Physics B* (1975-1986).
2. Member of the Editorial Board: *Computer Physics Communications* (1987-1994)
3. Member of the Editorial Board: *International C3IS Journal: Command, Control, Communications and Information Systems* (1987-1990)
4. Principal Editor: *Physics and Computers: International Journal of Modern Physics C* (1990-1998)
5. Member of Editorial board: *Theoretical and Computational Fluid Dynamics* (2002-2004)
6. Contributing Editor, *Grid Today* (2002-2003)

Industry Experience

Co-founder of WebWisdom.com and Anabas corporations.

Patents TangoInteractive Collaboration System, March 2000 with several members of WebWisdom.com

Books Authored

- 1) *Solving Problems in Concurrent Processors-Volume 1*, with M. Johnson, G. Lyzenga, S. Otto, J. Salmon, D. Walker, Prentice Hall, March 1988.
- 2) *Solving Problems in Concurrent Processors-Volume 2*, with I. Angus, J. Kim, D. Walker, Prentice Hall, 1990.
- 3) *Supercomputer Applications of the Hypercube*, published in *Supercomputing Systems*, Chapter 11, pp. 480-577 by Van Nostrand Reinhold Publishing House, New York, N.Y. editors Steve and Lana Kartashev (1989).
- 4) *Parallel Computing Works!*, with P. Messina, R. Williams, Morgan Kaufman (1994).
- 5) *The Sourcebook of Parallel Computing* book edited by Jack Dongarra, Ian Foster, Geoffrey Fox, William Gropp, Ken Kennedy, Linda Torczon, and Andy White, Morgan Kaufmann, November 2002 (3 chapters co-authored by Fox)
- 6) *Grid Computing: Making the Global Infrastructure a Reality* edited by Fran Berman, Geoffrey Fox and Tony Hey, John Wiley & Sons, Chichester, England, ISBN 0-470-85319-0, March 2003

Books Edited

- 7) *Phenomenology in Particle Physics*, 1971, (with C. B. Chiu and A. J. G. Hey), Proceedings of a conference at Caltech (organized by C. B. Chiu and G. C. Fox) in 1971.
- 8) *Hypercube Concurrent Computers and Applications*, Proceedings of the Third Conference on Hypercube Concurrent Computers and Applications, published by ACM, 1988.

Lecture Notes

1. "Phenomenology of Particle Physics," lecture notes for Physics 231, CALT-68-837, unpublished, 1980.
2. Numerous Courses and Tutorials have been put on the web including series Fox taught to Jackson State University 1997-2005
<http://grids.ucs.indiana.edu/ptliupages/publications/disted/>
3. Two recent tutorials are:
 Tutorial on "Implications of Parallel Computing for Multicore" at Microsoft Research February 26-March 1 2007
<http://grids.ucs.indiana.edu/ptliupages/presentations/PC2007/index.html> |
 Tutorial on "Web 2.0 and Grids" with Marlon Pierce May 21 2007
<http://grids.ucs.indiana.edu/ptliupages/presentations/CTSpertIMay21-07.ppt>
http://grids.ucs.indiana.edu/ptliupages/presentations/Web20Tutorial_CTS.ppt

Conferences Organized

1. Caltech 1971 (with C. B. Chiu) on "High Energy Physics Phenomenology."
2. Caltech 1979 on "Gauge Theories and Related High Energy Physics (Experimental and Theoretical) Topics."
3. JPL 1988 "Third Conference on Hypercube Concurrent Computers and Applications;" Chairperson of program committee.
4. Syracuse 1992 "First International Symposium on High-Performance Distributed

- Computing," Conference Chair.
5. Spokane 1993 ``Second International Symposium on High-Performance Distributed Computing," Conference Chair.
 6. San Francisco 1994 ``Third International Symposium on High-Performance Distributed Computing," Conference Chair.
 7. Washington, D.C. 1995 ``Fourth International Symposium on High-Performance Distributed Computing," Conference Chair.
 8. Syracuse 1996 ``Fifth International Symposium on High Performance Distributed Computing," Conference Chair.
 9. Syracuse 1996 "Java for Science and Engineering", Convener and Organizer
 10. Seattle 2002 "Java Grande-ISCOPE 2002", Program Chair (plus continued involvement in previous Java Grande activities 1996-2002)
 11. Chicago June 26-30, 2005 "GGF14 - The fourteenth Global Grid Forum", Program Chair
 12. GCC 2005, The 4th International Conference on Grid and Cooperative Computing, November 30-December 3, 2005, Beijing, China, Program co-chair
 13. Athens, Greece February 13-16, 2006 "GGF16 - The sixteenth Global Grid Forum", Program Chair
 14. Seattle, Washington, October 15-19, 2007, "The 21st Open Grid Forum - OGF21", Program Chair
 15. Bangalore, India, December 10-13 2007, "The 3rd International Conference on e-Science and Grid Computing", Program Chair
 16. Indianapolis, Indiana, December 7-12 2008, "The 4th International Conference on e-Science", General Chair <http://escience2008.iu.edu/>

58 PhD Theses supervised by Fox

1. Ahmet Fatih Mustacoglu *Event-based Infrastructure for Reconciling Distributed Annotation Records* Indiana University PhD July 31 2008
http://grids.ucs.indiana.edu/ptliupages/publications/AhmetFatihMustacoglu-Thesis-08_22_2008.pdf
2. Mehmet Nacar A *COMPONENT FRAMEWORK FOR BUILDING WEB SCIENCE GATEWAYS AND PORTALS* Indiana University PhD November 27 2007
<http://grids.ucs.indiana.edu/ptliupages/publications/Mehmet%20Nacar%20Dissertation%20Draft.pdf>
3. Kangseok Kim A *FRAMEWORK FOR SYNCHRONOUS AND UBIQUITOUS COLLABORATION* Indiana University PhD September 26 2007
<http://grids.ucs.indiana.edu/ptliupages/publications/KangseokDissertationFirstDraft.doc>
4. Beytullah Yildiz *Distributed Handler Architecture (DHArch)* Indiana University PhD May 28 2007 http://grids.ucs.indiana.edu/ptliupages/publications/byildiz_dissertation.pdf
5. Mehmet Aktas *Information Federation in Grid Information Services* Indiana University PhD May 3 2007
<http://grids.ucs.indiana.edu/ptliupages/publications/MehmetAktasThesis.pdf>
6. Hasan Bulut *HIGH PERFORMANCE RECORDING AND MANIPULATION OF DISTRIBUTED STREAMS* Indiana University PhD April 24 2007
<http://grids.ucs.indiana.edu/ptliupages/publications/HasanBulutThesis.pdf>
7. Harshawardhan Gadgil *SCALABLE, FAULT-TOLERANT MANAGEMENT OF GRID SERVICES: APPLICATION TO MESSAGING MIDDLEWARE* Indiana University PhD

- April 5 2007 <http://grids.ucs.indiana.edu/ptliupages/publications/hgadgil-THESIS.pdf>
8. Galip Aydin *Service Oriented Architecture for Geographic Information Systems Supporting Real Time Data Grids* Indiana University PhD January 15 2007
<http://grids.ucs.indiana.edu/ptliupages/publications/GalipAydin-Thesis.pdf>
 9. Gurhan Gunduz *A Framework for Network Monitoring and Performance Based Routing in Distributed Middleware Systems* Syracuse University PhD October 25 2006
<http://grids.ucs.indiana.edu/ptliupages/publications/GurhanThesis.pdf>
 10. Minjun Wang *GRID-BASED COLLABORATION* Syracuse University Computer Engineering August 2 2006 <http://grids.ucs.indiana.edu/ptliupages/publications/Minjun-Dissertation-Revision.pdf>
 11. Sangyoon Oh *Optimizing Web Service Performance in Mobile Computing* Indiana University PhD Computer Science August 1 2006
http://grids.ucs.indiana.edu/ptliupages/publications/SANGYOON_OH DISSERTATION final.pdf
 12. Jungkee Kim *Hybrid Search across peer-to-peer Federated Data* Florida State University April 6 2005 <http://grids.ucs.indiana.edu/ptliupages/publications/JKimDissertation.pdf>
 13. Ahmet Uyar *Scalable Service Oriented Architecture for Audio/Video Conferencing* Syracuse University March 23 2005
<http://grids.ucs.indiana.edu/ptliupages/publications/UyarThesisFinal.PDF>
 14. Xiaohong Qiu *Message-based MVC Architecture for Distributed and Desktop Applications* Syracuse University March 2 2005 (Honored as best Computer and Information Science Thesis at Syracuse University May 2005)
<http://grids.ucs.indiana.edu/ptliupages/publications/qiuPhDthesis.pdf>
 15. Sang Lim *PLATFORMS FOR HPJAVA: RUNTIME SUPPORT FOR SCALABLE PROGRAMMING IN JAVA* Florida State University June 11 2003
<http://grids.ucs.indiana.edu/ptliupages/publications/sanglimdissertation.pdf>
 16. Han-Ku Lee *TOWARDS EFFICIENT COMPILATION OF THE HPJAVA LANGUAGE FOR HIGH PERFORMANCE COMPUTING* Florida State University June 12 2003
<http://grids.ucs.indiana.edu/ptliupages/publications/hkleedissertationjune03.pdf>
 17. Sangmi Lee *A Modular Data Pipelining Architecture (MDPA) for enabling Universal Accessibility in P2P Grids* Florida State University July 3 2003
http://grids.ucs.indiana.edu/ptliupages/publications/Sangmi_Lee_thesis.pdf
 18. Choonhan Youn *Web Services Based Architecture in Computational Web Portals* Syracuse University November 7 2003
<http://grids.ucs.indiana.edu/ptliupages/publications/DissertationChoonhanYounRevision.pdf>
 19. Shrideep Pallickara, *A Grid Event Service*, Syracuse University 2001
<http://grids.ucs.indiana.edu/ptliupages/oldtheses/pallickara.pdf>
 20. Yuh-Jye Chang, *Architecture of fine-grained data flow network programming environment*, Syracuse University 2000
<http://grids.ucs.indiana.edu/ptliupages/oldtheses/chang.pdf>
 21. M. A. Saleh Elmohammed, *Algorithms and heuristics for combinatorial optimization problems: Case study of academic course scheduling*, Syracuse University 2000
<http://grids.ucs.indiana.edu/ptliupages/oldtheses/elmohammed.pdf>
 22. Sung-Hoon Ko, *Object-based message passing in high performance computing using Java*, Syracuse University 2000 <http://grids.ucs.indiana.edu/ptliupages/oldtheses/ko.pdf>
 23. Myeongjin Lee, *Information architecture of interactive and customizable learning environments*, Syracuse University 2000

- <http://grids.ucs.indiana.edu/ptliupages/oldtheses/lee.pdf>
24. Tseng-Hui Lin, *Parallelizing legacy applications using message passing programming model and the example of MOPAC*, Syracuse University 2000
<http://grids.ucs.indiana.edu/ptliupages/oldtheses/lin.pdf>
 25. Bokyun Na, *System model and taxonomy for host-network interfaces*, Syracuse University 2000 <http://grids.ucs.indiana.edu/ptliupages/oldtheses/nafinalthesis.pdf>
 26. Mehmet Sen, *Distributed open asynchronous information access environment*, Syracuse University 2000 <http://grids.ucs.indiana.edu/ptliupages/oldtheses/sen.pdf>
 27. Erol Akarsu, *Integrated Three-Tier Architecture for High-Performance Commodity Metacomputing*, Syracuse University 1999.
http://grids.ucs.indiana.edu/ptliupages/oldtheses/Akarsu_finalversionwithFormatted.pdf
 28. Alvin Leung, *Real-time interactive client-server terrain rendering*, Syracuse University 1997 <http://grids.ucs.indiana.edu/ptliupages/oldtheses/leung.pdf>
 29. Kivanc Dincer, *World-wide virtual machine: A metacomputing environment integrating World Wide Web and high performance computing and communications technologies*, Syracuse University 1997 <http://grids.ucs.indiana.edu/ptliupages/oldtheses/dincer.pdf>
 30. David Edelson, *Random interactions with disk galaxies* Syracuse University 1996
<http://grids.ucs.indiana.edu/ptliupages/oldtheses/edelson.pdf>
 31. Gang Cheng, *A dataflow-based software integration model in parallel and distributed computing and applications*, Syracuse University 1996
<http://grids.ucs.indiana.edu/ptliupages/oldtheses/cheng.pdf>
 32. Gregor von Laszewski, *A parallel data assimilation system and its implications on a metacomputing environment*, Syracuse University 1996
<http://grids.ucs.indiana.edu/ptliupages/oldtheses/laszewskithesis.pdf>
 33. Nawal Copt, *Language and runtime support for the execution of hierarchical clustering applications on distributed-memory machines*, Syracuse University 1995
<http://grids.ucs.indiana.edu/ptliupages/NPAC-SCCSIndex-PDFPreserved/sccs-0751.pdf>
 34. David Koester, *Parallel block-diagonal-bordered sparse linear solvers for power systems applications*, Syracuse University 1995
<http://grids.ucs.indiana.edu/ptliupages/oldtheses/koester.pdf>
 35. Leiping Han, *Monte Carlo Simulations of Random Surfaces with Extrinsic Curvature*, Syracuse University Physics 1995 <http://www.new-npac.org/users/fox/pdftotal/sccs-0671.pdf>
 36. Zeki Bozkus, *Compiling Fortran 90D/HPF for Distributed Memory MIMD computers*, Syracuse University 1995 <http://www.new-npac.org/users/fox/pdftotal/sccs-0730.pdf>
 37. Zheng-Yao Su, *The Hierarchical Algorithms: Theory and Applications*, Caltech 1994.
 38. John Apostolakis, *Asymptotic scaling in the two-dimensional $O(3)$ nonlinear sigma model: A Monte Carlo study on parallel computers*, Caltech 1994
 39. Nashat Mansour. *Physical Optimization Algorithms for Mapping Data to Distributed-Memory Multiprocessors*, Syracuse University 1992
<http://grids.ucs.indiana.edu/ptliupages/NPAC-SCCSIndex-PDFPreserved/sccs-0345.pdf>
 40. Ken Rose, *Deterministic Annealing, Clustering, and Optimization*, Electrical Engineering, Caltech 1990
 41. John K. Salmon, *Parallel Hierarchical N-Body Methods*, Caltech, 1990.
 42. Roberto Battiti, *Multiscale Methods, Parallel Computation, and Neural Networks for Computer Vision*,. Computation and Neural Systems, Caltech 1990

43. Paul Stolorz, *NUMERICAL SIMULATIONS OF LATTICE QCD (MONTE CARLO, LATTICE GAUGE THEORY*, Caltech 1987
44. Jon Flower, *Lattice gauge theory on a parallel computer*, Caltech 1987
45. Adam Kolawa. *Semi-analytical Calculation of the 0^{++} Glueball Mass in $SU(2)$ Gauge Theory*, Caltech 1986
46. Eric Mjolsness, *NEURAL NETWORKS, PATTERN RECOGNITION, AND FINGERPRINT HALLUCINATION (COLLECTIVE COMPUTATION)*, Caltech 1986
47. Mark Johnson, *Concurrent Computation and its Application to the Study of Melting in Two Dimensions*. Caltech 1986
48. Apoorva Patel, *Monte Carlo Renormalization Group for Lattice QCD*, Caltech 1984
49. Steve Otto, *Monte Carlo Methods in Lattice Gauge Theories*, Caltech 1983.
50. Michael Shatz, *A QCD Based Model of Hadron Hadron Scattering*, Caltech 1983
51. Sarbmeet Kanwal, *A Leading Order QCD Computation of $\pi\pi$ Elastic Scattering*, Caltech 1983
52. Rajan Gupta, *Mass Gap and Scaling in the $O(3)$ Sigma Model in 1+1 Dimension*, Caltech 1982
53. Kar Woo Yung, *Study of hadronic jets produced by charged pion and proton beams incident on hydrogen and aluminum targets*, Caltech 1980
54. James Rohlf, *JET PRODUCTION IN HIGH-ENERGY HADRON-PROTON COLLISIONS*, Caltech 1980
55. Stuart Stampke, *PION-PION DECAY DISTRIBUTIONS FOR PION(-) PROTON --> PION(+) PION(-) NEUTRON AT 100 AND 175 GEV/C*, Caltech 1982
56. Stephen Wolfram, *Some topics in theoretical high-energy physics*, Caltech 1980
57. Daniel Novoseller, *PION-EXCHANGE IN A PARTIAL WAVE ANALYSIS OF PION-NUCLEON ---> NUCLEON,PION,PION*, Caltech 1977
58. Robert Worden, *Regge models of forward pion and eta photoproduction*, Caltech 1972

Open Source Software and Resources

1. <http://www.chembiogrid.org> This hosts open-source software from the Chemical Informatics and Cyberinfrastructure Collaboratory at Indiana University
2. <http://www.collab-ogce.org/> Multi-institution Grid Portal (Open Grid Computing Environment) resource
3. <http://www.crisisgrid.net/html/projects.html> Open Geospatial Consortium standards compliant Web Services for Geographical Information Systems. Core Software for SERVOnet Complexity Computational Environment.
4. <http://www.globalmmcs.org/> Service oriented audio-video conferencing and collaboration environment (this software is being revised and is not useable at end of 2006)
5. <http://www.hpjava.org/> Parallel Java Compiler and mpiJava Java binding to MPI
6. <http://www.undergroundfilm.org/> multimedia digital objects (this was taken off the air and rehosted commercially May 2007 due to support funding issues)
7. <http://www.opengrids.org/> Core Grid and Web Service software including Extended UDDI, WS-Context, Calendaring Service and older GXOS and XML Nuggets.
8. <http://www.infomall.org/salsa> Performance Measurements and Kernel Software on multicore chips
9. <http://www.naradabroker.org/> Grid and Web Service publish-subscribe messaging infrastructure

10. <http://gf7.ucs.indiana.edu:8080/gridsphere> QuakeSim portal web site providing interactivity and support for high performance computing and used for geophysics classes at California State University-Northridge
11. <http://gw11.quarry.iu.teragrid.org:8080/gridsphere/gridsphere> QuakeSim GPS Portal which is subset of QuakeSim portal dedicate to GPS-related components. Hosted on IU's TeraGrid gateway hosting service.
12. <http://www.msi-ciec.org>. MSI-CIEC Portal
13. <http://live.escience2008.iu.edu/calendar/Calendar.html> e-Science Live Audio-Video broadcasting site Live site integrating live and archived video and audio feeds, chats, and blogs for E-Science 2008.

----- **Presentations and Publications 2008** -----

2008 Journal Articles

1. Marlon E. Pierce, Geoffrey C. Fox, Jong Y. Choi, Zhenhua Guo, Xiaoming Gao, and Yu Ma [Using Web 2.0 for Scientific Applications and Scientific Communities](#) To appear in Concurrency and Computation: Practice and Experience Special Issue for 3rd International Conference on Semantics, Knowledge and Grid [SKG2007](#) Xian China October 28-30 2007
2. Galip Aydin, Ahmet Sayar, Harshawardhan Gadgil, Mehmet S. Aktas, Geoffrey C. Fox, Sunghoon Ko, Hasan Bulut, and Marlon E. Pierce [Building and Applying Geographical Information System Grids](#) Special Issue on Geographical information Systems and Grids based on GGF15 [workshop](#), Concurrency and Computation: Practice and Experience 20(14): 1653-1695 (2008)
3. Mehmet S. Aktas, Sangyoon Oh, Geoffrey C. Fox, Marlon E. Pierce [XML Metadata Services](#) Special Issue for 2nd International Conference on Semantics, Knowledge and Grid [SKG2006](#) Guilin China October 31 - November 3 2006. Concurrency and Computation: Practice and Experience 20(7): 801-823 (2008)
4. Byounghoon Lee, Sunghwa Lim, Jai-Hoon Kim , and Geoffrey Fox [Lease Based Consistency Scheme in the Web Environment](#) Future Generation Computer Systems Volume 25, Issue 1, January 2009, Pages 8-19
5. Geoffrey Fox and Marlon Pierce [Grids Challenged by a Web 2.0 and Multicore Sandwich](#) Special Issue of Concurrency&Computation:Practice&Experience on Seventh IEEE International [Symposium](#) on Cluster Computing and the Grid — CCGrid 2007, Keynote Talk Rio de Janeiro Brazil May 15 2007
6. Shrideep Pallickara, Hasan Bulut and Geoffrey Fox [Fault-Tolerant Reliable Delivery of Messages in Distributed Publish/Subscribe Systems](#) to appear in International Journal of Autonomic Computing 2008
7. Shantenu Jha, Andre Merzky, Geoffrey Fox [Using Clouds to Provide Grids Higher-Levels of Abstraction and Explicit Support for Usage Modes](#) Concurrency&Computation: Practice&Experience Special Issue on Open Grid Forum to be published (earlier version [Using Clouds to Provide Grids Higher-Levels of Abstraction and Explicit Support for Usage Modes](#) Technical Report April 8 2008)
8. Shrideep Pallickara, Geoffrey Fox and Harshawardhan Gadgil. [On the Secure Creation, Organization and Discovery of Topics in Distributed Publish/Subscribe Systems.](#) International Journal of High Performance Computing and Networking (IJHPCN). Vol. 5,

No. 3, pp.156-167. 2008. Special Issue of extended versions of the 6 best papers at the ACM/IEEE GRID 2005 Workshop.

2008 Book Chapters

1. Ahmet Sayar, Geoffrey C. Fox , Marlon E. Pierce [Unified Data Access/query over Integrated Data-views for Decision Making in Geographic Information Systems](#) (old version [Supporting Event-based Unified Data Access/query over Integrated Data-views for Decision Making in Geographic Information Systems](#)) chapter in book " Grid Technology for Maximizing Collaborative Decision Management and Support: Advancing Effective Virtual Organizations"
2. Geoffrey C. Fox, Rajarshi Guha, Donald F. McMullen, Ahmet Fatih Mustacoglu, Marlon E. Pierce, Ahmet E. Topcu, and David J. Wild [Web 2.0 for Grids and e-Science](#) INGRID 2007 - Instrumenting the Grid 2nd International [Workshop](#) on Distributed Cooperative Laboratories - S.Margherita Ligure Portofino, ITALY, April 18 2007

2008 Conference Papers

1. Jong Y. Choi, Joshua Rosen, Siddharth Maini, Marlon E. Pierce, and Geoffrey C. Fox [Collective Collaborative Tagging System](#) Proceedings of [GCE08](#) workshop at [SC08](#) Austin Texas November 16 2008
2. Shrideep Pallickara, Jaliya Ekanayake, and Geoffrey Fox. [An Overview of the Granules Runtime for Cloud Computing](#). Proceedings of the IEEE International [Conference](#) on e-Science. Indianapolis. 2008. December 7-12 2008
3. Jaliya Ekanayake, Shrideep Pallickara, and Geoffrey Fox [Map-Reduce for Data Intensive Scientific Analyses](#) .(Earlier version [Map-Reduce for Data Intensive Scientific Analyses](#)) Proceedings of the IEEE International [Conference](#) on e-Science. Indianapolis. 2008. December 7-12 2008
4. Kangseok Kim, Rajarshi Guha, Marlon E. Pierce, Geoffrey C. Fox, David J. Wild, Kevin E. Gilbert [SQMD: Architecture for Scalable, Distributed Database System built on Virtual Private Servers](#) Proceedings of "eScience for Cheminformatics and Drug Discovery" workshop at [eScience 2008](#) , Indianapolis, IN Dec 12, 2008.
5. Geoffrey Fox [Distributed and Parallel Programming Environments and their performance](#) Abstract of keynote talk at Microsoft Research eScience [Workshop](#) December 9 2008 IEEE International [Conference](#) on e-Science. Indianapolis. 2008. December 7-12 2008
6. Mehmet S. Aktas, Geoffrey Fox and Marlon Pierce [Information Federation in Grids](#) 4th International [Conference](#) on Semantics, Knowledge and Grid (SKG 2008) Beijing China December 3-5 2008
7. Linda B. Hayden, Geoffrey Fox, Anthony Adade [Implementing Cyberinfrastructure in Support of Greenland and Antarctic SAR Data Sets](#) Abstract for AARSE [Conference](#). 7th International Conference of the African Association of Remote Sensing of the Environment (AARSE)-2008 Accra Ghana October 27-31 2008
8. Geoffrey Fox [Integrating Parallel and Distributed Computing across Scientific and Web 2.0 Applications](#) Abstract of keynote talk at 7th International [Conference](#) on Grid and Cooperative Computing GCC2008 Shenzhen China October 24-26 2008

9. Xiaohong Qiu (presenter), Geoffrey C. Fox, Huapeng Yuan, Seung-Hee Bae, George Chrysanthakopoulos, Henrik Frystyk Nielsen [Parallel Data Mining on Multicore Clusters](#) (Old version [Parallel Data Mining on Multicore Systems](#)) 7th International [Conference](#) on Grid and Cooperative Computing GCC2008 Shenzhen China October 24-26 2008
10. Shantenu Jha, Andre Merzky and Geoffrey Fox [Programming Abstractions for Clouds](#) CCA-08 Cloud Computing and its Applications Chicago ILL October 22-23 2008
11. Geoffrey Fox and Marlon Pierce [Web 2.0 and Cloud Computing](#) Abstract of talk at APRU Association of Pacific Rim Universities 4th Earthquake and Tsunami [Symposium](#) August 21 - 22, 2008 University of California, Davis (USA)
12. Marlon Pierce and Geoffrey Fox [QuakeSim Web Computing Infrastructure](#) Abstract of talk at APRU Association of Pacific Rim Universities 4th Earthquake and Tsunami [Symposium](#) August 21 - 22, 2008 University of California, Davis (USA)
13. Geoffrey Fox [Parallel Data Mining from Multicore to Cloudy Grids](#) INTERNATIONAL ADVANCED RESEARCH WORKSHOP ON HIGH PERFORMANCE COMPUTING AND GRIDS [HPC2008](#) Cetraro Italy June 30 - July 4, 2008
14. Beytullah Yildiz, Geoffrey Fox, Shrideep Pallickara [An Orchestration for Distributed Web Service Handlers](#) The Third International [Conference](#) on Internet and Web Applications and Services ICIW 2008 June 8-13, 2008 - Athens, Greece
15. Mehmet S. Aktas, Geoffrey C. Fox, Marlon Pierce, [Principles and Experiences: Building a Hybrid Metadata Service for Service Oriented Architecture based Grid Applications](#), accepted for The Third International IEEE International [Conference](#) on Internet and Web Applications and Services ICIW'08 June 8-13, 2008 - Athens, Greece
16. Alex Ramirez, Geoffrey Fox, Al Kuslikis, Richard Alo, Karl Barnes, Diane Baxter, and Julie Foertsch [Engaging Minority-Serving Institutions \(MSIs\) in Cyberinfrastructure \(CI\) through CI Days](#) The 3rd annual TeraGrid [Conference](#), TeraGrid '08 All Hands Meeting Riviera Hotel and Casino in Las Vegas Nevada, June 9-13 2008
17. Xiaohong Qiu, Geoffrey C. Fox, Huapeng Yuan, Seung-Hee Bae, George Chrysanthakopoulos, Henrik Frystyk Nielsen [PARALLEL CLUSTERING AND DIMENSIONAL SCALING ON MULTICORE SYSTEMS](#) Invited talk at he 2008 High Performance Computing & Simulation Conference ([HPCS 2008](#)) In Conjunction With The 22nd EUROPEAN CONFERENCE ON MODELLING AND SIMULATION (ECMS 2008) Nicosia, Cyprus June 3 - 6, 2008; Springer Berlin / Heidelberg Lecture Notes in Computer Science Volume 5101/2008 "Computational Science: ICCS 2008" ISBN 978-3-540-69383-3 Pages 407-416 [DOI](#)
18. Marlon E. Pierce Geoffrey C. Fox Joshua Rosen Siddharth Maini and Jong Y. Choi [Social Networking for Scientists Using Tagging and Shared Bookmarks: a Web 2.0 Application](#) 2008 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2008) at The Hyatt Regency Irvine Irvine, California, USA May 19-23, 2008
19. Jaliya Ekanayake, Shrideep Pallickara and Geoffrey Fox [Collaborative Framework for Scientific Data Analysis](#) 2008 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2008) at The Hyatt Regency Irvine Irvine, California, USA May 19-23, 2008
20. Ahmet Fatih Mustacoglu and Geoffrey Fox [Hybrid Consistency Framework for Distributed Annotation Records in a Collaborative Environment](#) 2008 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2008) at The Hyatt Regency Irvine Irvine, California, USA May 19-23, 2008

21. Geoffrey Fox, Alex Ho, Rui Wang, Edward Chu and Isaac Kwan [A Collaborative Sensor Grids Framework](#) 2008 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2008) at The Hyatt Regency Irvine Irvine, California, USA May 19-23, 2008
22. Xiaohong Qiu, Geoffrey C. Fox, Huapeng Yuan, Seung-Hee Bae, George Chrysanthakopoulos, Henrik Frystyk Nielsen [Performance of Multicore Systems on Parallel Data Clustering with Deterministic Annealing](#) ICCS 2008: "Advancing Science through Computation" [Conference](#); ACC CYFRONET and Institute of Computer Science AGH University of Science and Technology Kraków, POLAND; June 23-25, 2008. Springer Lecture Notes in Computer Science Volume 5101, pages 407-416, 2008. [DOI](#)
23. Marlon Pierce and Geoffrey Fox [Web 2.0 and Geo-sciences](#) Abstract for 6th ACES International [Workshop](#) Cairns, Australia from 11 to 16 May 2008.
24. Pierce, M, Gao, X, Fox, G, Granat, R and Donnellan, A [Services and Components for the QuakeSim Project](#) Abstract for 6th ACES International [Workshop](#) Cairns, Australia from 11 to 16 May 2008.
25. Marlon E. Pierce, Geoffrey C. Fox, Galip Aydin, Zhigang Qi, Andrea Donnellan, Jay Parker and Robert Granat [QuakeSim: Web Services, Portals, and Infrastructure for Geophysics](#) December 19 2007 to be published in 2008 IEEE Aerospace [Conference](#) March 1-8 2008, Big Sky MT

2008 Technical Reports (or submitted to journals/conferences and under review)

1. Marlon E. Pierce, Xiaoming Gao, Sangmi L. Pallickara, Zhenhua Guo, Geoffrey C. Fox [QuakeSim Portal and Services](#) submitted to Concurrency&Computation: Practice&Experience Special Issue on Computation and Informatics in Earthquake Science: The ACES Perspective 6th ACES International [workshop](#) Cairns, Australia 11 - 16 May 2008
2. Yili Gong, Marlon E. Pierce, and Geoffrey C. Fox [Dynamic Resource-Critical Workflow Scheduling in Heterogeneous Environments](#) Technical Report December 6 2008
3. Rajarshi Guha, Kevin Gilbert, Geoffrey Fox, Marlon Pierce, David Wild, Huapeng Yuan [Advances in Cheminformatics Methodologies and Infrastructure to Support the Data Mining of Large, Heterogeneous Chemical Datasets](#) November 4 2008 submitted to CURRENT COMPUTER-AIDED DRUG DESIGN
4. Sangyoon Oh, Jai-Hoon Kim and Geoffrey Fox [Real-Time Performance Analysis for Publish/Subscribe Systems](#) Technical Report October 20 2008
5. Shrideep Pallickara and Geoffrey Fox [Enabling Hierarchical Dissemination of Streams in Content Distribution Networks](#) Technical report August 15 2008
6. Yili Gong, Marlon Pierce and Geoffrey Fox [Dynamic Resource-Critical Workflow Scheduling in Heterogeneous Environments](#) Technical Report August 10 2008
7. Kangseok Kim, Wenjun Wu and Geoffrey Fox [XGSP-Floor: Floor Control for Synchronous and Ubiquitous Collaboration](#) Technical Report August 2 2008
8. Jaliya Ekanayake, Shrideep Pallickara, and Geoffrey Fox [Performance of Data Intensive Supercomputing Runtime Environments](#) Technical report August 1 2008
9. Shantenu Jha, Andre Merzky and Geoffrey Fox [Using Clouds to Provide Grids Higher-Levels of Abstraction and Explicit Support for Usage Modes](#) Open Grid Forum Information [Document](#) July 14 2008

10. Jong Youl Choi [Clustering Analysis of Collaborative Tagging Systems By Using The Graph Model](#) Technical Report May 25 2008
11. Kangseok Kim, Rajarshi Guha, Marlon E. Pierce, Geoffrey C. Fox, David J. Wild, Kevin E. Gilbert [Architecture for Scalable, Distributed Database System built on Multicore Servers](#) Technical report May 21 2008
12. Xiaohong Qiu, Geoffrey C. Fox, Huapeng Yuan, and Seung-Hee Bae [Parallel Data Mining on Multicore Systems](#) Technical Report May 13 2008
13. Jaliya Ekanayake, Shrideep Pallickara, and Geoffrey Fox [An Architecture for Composable Scientific Data Analysis](#) Technical Report March 10 2008
14. Xiaohong Qiu, Geoffrey C. Fox, Huapeng Yuan, Seung-Hee Bae, [Parallel Datamining on Multicore Systems](#) Technical Report February 20 2008
15. Jaliya Ekanayake, Shrideep Pallickara and Geoffrey Fox [Architecture for Composable Scientific Data Analysis](#) Technical Report January 31 2008
16. Beytullah Yildiz, Shrideep Pallickara and Geoffrey Fox [An Orchestration for Distributed Web Service Handlers](#) Technical Report January 15 2008

2008 Meetings and Presentations

1. Jaliya Ekanayake, Shrideep Pallickara and Geoffrey Fox [MapReduce for Data Intensive Scientific Analyses](#) Regular session December 12 at IEEE International [Conference](#) on e-Science. Indianapolis. 2008. December 7-12 2008
2. Geoffrey Fox and Shrideep Pallickara [Cyberinfrastructure Capabilities at CGL](#) Presentation via videoconferencing to Virginia Tech December 12 2008
3. Geoffrey Fox [Programming Abstractions for Multicore Clouds](#) at Abstractions for Distributed Applications and Systems [workshop](#) December 11 2008 at IEEE International [Conference](#) on e-Science. Indianapolis. 2008. December 7-12 2008
4. Geoffrey Fox [Multicore for Science](#) at Assessing the Potential Impact and Challenges of ManyCore Processors on eScience [Panel Discussion](#) December 11 2008 moderated by Dennis Gannon at IEEE International [Conference](#) on e-Science. Indianapolis. 2008. December 7-12 2008
5. Geoffrey Fox [Distributed and Parallel Programming Environments and their performance](#) (work of Service Aggregated Linked Sequential Activities: SALSA Multicore (parallel datamining) research Team at IUB Judy Qiu, Scott Beason, Jong Youl Choi, Seung-Hee Bae, Jaliya Ekanayake, Yang Ruan, Huapeng Yuan) and in different layout [Distributed and Parallel Programming Environments and their performance](#) Keynote talk at Microsoft Research eScience [Workshop](#) December 9 2008 IEEE International [Conference](#) on e-Science. Indianapolis. 2008. December 7-12 2008
6. Geoffrey Fox and Marlon Pierce(presenter) [Clouds and Web2.0 II: Case Study and Tutorial](#)
7. Geoffrey Fox [Cyberinfrastructure and PolarGrid](#) North Carolina Research and Education Network NCREN [Community Day](#) (via video conference) December 5 2008
8. Geoffrey Fox [Earthquake Polar and Sensor Grids](#) Presentation at AIST Japan booth at [SC08](#) Austin Texas November 20 2008
9. Jong Y. Choi, Joshua Rosen, Siddharth Maini, Marlon E. Pierce, and Geoffrey C. Fox [Collective Collaborative Tagging System](#) Presentation at [GCE08](#) workshop at [SC08](#) Austin Texas November 16 2008

10. Geoffrey Fox [Clouds and Grids Multicore and all that](#) Panel chaired by Dennis Gannon at International [Conference](#) on Grid computing, high-performance and Distributed Applications (GADA'08) Monterrey, Mexico, November 14 2008
11. Geoffrey Fox [Cyberinfrastructure An Opportunity for UHD](#) Presentation at Cyberinfrastructure day [CI@UHD](#) at University of Houston Downtown November 7 2008
12. Geoffrey Fox [Distributed and Parallel Programming Environments and their performance](#) Keynote talk at 7th International [Conference](#) on Grid and Cooperative Computing GCC2008 Shenzhen China October 24 2008
13. Geoffrey Fox [Technology Futures and Lots of Sensor Grids](#) Presentation at Community Grids Laboratory October 1 2008
14. Geoffrey Fox [Multicore and Cloud Futures](#) Panel on “Cloudy Future” at Clusters and Computational Grids for Scientific Computing [CCGSC 2008](#) Highland Lake Inn Flat Rock, North Carolina September 15 2008
15. Geoffrey Fox [Technology Futures and Lots of Sensor Grids](#) APRU Association of Pacific Rim Universities 4th Earthquake and Tsunami [Symposium](#) August 21 - 22, 2008 University of California, Davis (USA)
16. Geoffrey Fox [Research Issues and IUPUI Informatics](#) Presentation to IUPUI Informatics department Bradford Woods August 15 2008
17. Geoffrey Fox and Alex Ho [Collaboration, Grid, Web 2.0, Cloud Technologies](#) (Longer Version [Collaboration, Grid, Web 2.0, Cloud Technologies](#)) Boeing Seattle Presentation August 14 2008
18. Marlon Pierce and Geoffrey Fox [QuakeSim Quarterly Update](#) Internal Report on QuakeSim August 9 2008
19. Geoffrey Fox and Alex Ho [SBIR Final Meeting Collaboration Sensor Grid and Grids of Grids Information Management](#) presentation at Ball Aerospace July 9 2008
20. Geoffrey Fox and Alex Ho [SBIR Final Meeting Collaboration Sensor Grid and Grids of Grids Information Management](#) (or longer version [SBIR Final Meeting Collaboration Sensor Grid and Grids of Grids Information Management](#)) presentation at Ball Aerospace July 8 2008
21. Geoffrey Fox discussing work with: Seung-Hee Bae, Neil Devadasan, Jaliya Ekanayake, Rajarshi Guha, Shrideep Pallickara, Marlon Pierce, Xiaohong Qiu, Haixu Tang David Wild, Huapeng Yuan, George Chrysanthakopoulos, Henrik Frystyk Nielsen [Data Analysis from Cores to Clouds](#) HPC 2008 High Performance Computing and Grids [workshop](#) Cetraro Italy July 3 2008
22. [Cloud Systems Panel](#) at HPDC 2008 [Conference](#) with Geoffrey Fox as moderator June 25 2008
23. Geoffrey Fox [Challenges and New Trends in Data Intensive Science](#) Panel at Data-aware Distributed Computing (DADC) Workshop HPDC [Conference](#) Boston June 24 2008
24. Judy Qiu (presenter), Geoffrey Fox, Huapeng Yuan, Seung-Hee Bae, George Chrysanthakopoulos, Henrik Nielsen [Parallel Data Mining on Multicore Clusters](#) ICCS 2008: "Advancing Science through Computation" [Conference](#); ACC CYFRONET and Institute of Computer Science AGH University of Science and Technology Kraków, POLAND; June 23 2008
25. Alex Ramirez, Hispanic Association of Colleges and Universities, Geoffrey Fox, Indiana University, Al Kuslikis, American Indian Higher Education Consortium,

Richard Alo, University of Houston-Downtown,
Karl Barnes, National Association for Equal Opportunity in Higher Education,
Diane Baxter, San Diego Supercomputer Center, and
Julie Foertsch [Engaging Minority-Serving Institutions \(MSIs\) in Cyberinfrastructure \(CI\) through CI Days](#) The 3rd annual TeraGrid [Conference](#), TeraGrid '08 All Hands Meeting Riviera Hotel and Casino in Las Vegas Nevada, June 11 2008

26. Geoffrey Fox [Challenges Facing Modeling and Simulation in HPC Environments Panel remarks](#) Panel at [HPCS](#) 2008 at The 22nd EUROPEAN CONFERENCE ON MODELLING AND SIMULATION (ECMS 2008) [Multiconference](#) Nicosia Cyprus June 6 2008
27. Geoffrey Fox [Parallel Computing and Multicore 2008: Tutorial](#) Tutorial at [HPCS](#) 2008 at The 22nd EUROPEAN CONFERENCE ON MODELLING AND SIMULATION (ECMS 2008) [Multiconference](#) Nicosia Cyprus June 5 2008
28. Geoffrey Fox discussing work with: Seung-Hee Bae, Neil Devadasan, Rajarshi Guha, Marlon Pierce, Xiaohong Qiu, Haixu Tang David Wild, Huapeng Yuan, George Chrysanthakopoulos, Henrik Frystyk Nielsen [CCR Multicore Performance](#) Tutorial at at [HPCS](#) 2008 at The 22nd EUROPEAN CONFERENCE ON MODELLING AND SIMULATION (ECMS 2008) [Multiconference](#) Nicosia Cyprus June 5 2008
29. Geoffrey Fox discussing work with: Seung-Hee Bae, Neil Devadasan, Rajarshi Guha, Marlon Pierce, Xiaohong Qiu, Haixu Tang David Wild, Huapeng Yuan, George Chrysanthakopoulos, Henrik Frystyk Nielsen [High Performance Data mining on Multicore Systems](#) Paper at [HPCS](#) 2008 at The 22nd EUROPEAN CONFERENCE ON MODELLING AND SIMULATION (ECMS 2008) [Multiconference](#) Nicosia Cyprus June 4 2008
30. Geoffrey Fox [Multicore Grids and the Data Deluge](#) Keynote at [HPCS](#) 2008 at The 22nd EUROPEAN CONFERENCE ON MODELLING AND SIMULATION (ECMS 2008) [Multiconference](#) Nicosia Cyprus June 4 2008
31. S Jha, A Merzky, G Fox [Clouds Provide Grids with Higher- Levels of Abstraction and Explicit Support for Usage Modes](#) or [Clouds, Grids, and the Rest: An attempted clarification](#) Cloud workshop at [OGF23](#) Barcelona Spain June 2 2008
32. Geoffrey Fox [OGF23 eScience Highlights](#) Introductory remarks at [OGF23](#) Barcelona Spain June 2 2008
33. Geoffrey Fox [OGF eScience Function](#) GFSG meeting at [OGF23](#) Barcelona Spain June 1 2008
34. Jaliya Ekanayake, Shrideep Pallickara, and Geoffrey Fox [A Collaborative Framework for Scientific Data Analysis and Visualization](#) at 2008 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2008) at The Hyatt Regency Irvine Irvine, California, USA May 21 2008
35. Ahmet Fatih Mustacoglu Geoffrey C. Fox [Hybrid Consistency Framework for Distributed Annotation Records in a Collaborative Environment](#) at 2008 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2008) at The Hyatt Regency Irvine Irvine, California, USA May 21 2008
36. Marlon Pierce, Geoffrey Fox, Joshua Rosen, Siddharth Maini, and Jong Youl Choi [Social Networking for Research Communities Using Tagging and Shared Bookmarks: a Web 2.0 Application](#) at 2008 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2008) at The Hyatt Regency Irvine Irvine, California, USA May 21 2008

37. Geoffrey Fox, Alex Ho, Rui Wang, Edward Chu and Isaac Kwan [A Collaborative Sensor Grids Framework](#) at 2008 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2008) at The Hyatt Regency Irvine Irvine, California, USA May 20 2008
38. Geoffrey Fox and Marlon Pierce [Clouds and Web2.0 II: Case Study and Tutorial](#) Tutorial at 2008 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2008) at The Hyatt Regency Irvine Irvine, California, USA May 19 2008
39. Geoffrey Fox and Marlon Pierce [Clouds and Web2.0 Introduction](#) (older [ppt](#)) Tutorial at 2008 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2008) at The Hyatt Regency Irvine Irvine, California, USA May 19 2008
40. Geoffrey Fox, Rajarshi Guha, Kevin E. Gilbert, Marlon Pierce, David Wild [Highlights of the Indiana University Exploratory Chemical Informatics Center](#) prepared for NIH meeting May 17 2008
41. Geoffrey Fox [Technology Futures for ACES: Clouds Web2.0 and Multicore](#) ACES group [meeting](#) Cairns Australia May 15 2008
42. Geoffrey Fox [Vision for Informatics Department](#) Informatics department meeting Indiana University Bloomington April 18 2008
43. Geoffrey Fox [OGF eScience Function](#) OGF Board Review April 9 2008
44. Geoffrey Fox discussing work with: Seung-Hee Bae, Neil Devadasan, Rajarshi Guha, Marlon Pierce, Xiaohong Qiu, Haixu Tang David Wild, Huapeng Yuan, George Chrysanthakopoulos, Henrik Frystyk Nielsen [High Performance Robust Datamining for Cheminformatics](#) American Chemical Society Division of Chemical Information Session: Cheminformatics: From Teaching to Research ACS Spring [Meeting](#) New Orleans April 8 2008
45. Rajarshi Guha (presenter), Geoffrey Fox, Kevin E. Gilbert, Marlon Pierce, David Wild [A Web-Service Approach for Distributed Access to Methods, Data and Models \(I Don't Care Where My Data and Methods Are\)](#) American Chemical Society Division of Chemical Information Session: Cheminformatics: From Teaching to Research ACS Spring [Meeting](#) New Orleans April 6 2008
46. Geoffrey Fox and Craig Stewart [Opportunities in Cyberinfrastructure and the TeraGrid](#) (partly based on AAAS [presentation](#)) ADMI (Association of Computer and Information Science/Engineering Departments at Minority Institutions) [Annual Symposium 2008](#) Virginia Beach, April 4 2008
47. Xiaohong Qiu, Geoffrey Fox, Huapeng Yuan, George Chrysanthakopoulos, Henrik Frystyk Nielsen [High Performance Data Mining with Services on Multi-core Systems](#) (Updated [here](#)) Presentation at Shanghai Many-Core [Workshop](#) Shanghai, China March 28, 2008
48. Xiaohong Qiu, Geoffrey Fox, Huapeng Yuan, George Chrysanthakopoulos, Henrik Frystyk Nielsen [High Performance Data Mining with Services on Multi-core Systems](#) poster for Shanghai Many-Core [Workshop](#) Shanghai, China March 27-28, 2008
49. Geoffrey Fox [Clouds Web2.0 and Multicore for Data Intensive Computing](#) LSU Baton Rouge LSU : [Center for Computation & Technology](#) Colloquium, March 14 2008
50. Geoffrey Fox [Cyberinfrastructure for e-Education and e-Research \(e-Science\)](#) Cyberinfrastructure Days New Mexico Highlands University Las Vegas NM March 10-11 2008
51. Geoffrey Fox discussing work with: Seung-Hee Bae, Neil Devadasan, Rajarshi Guha, Marlon Pierce, Xiaohong Qiu, Haixu Tang David Wild, Huapeng Yuan, George

- Chrysanthakopoulos, Henrik Frystyk Nielsen [High Performance Data Mining on Multi-core Systems](#) Presentation at Microsoft Technical Computing All Hands Meeting March 7 2008
52. Geoffrey Fox discussing work with: Seung-Hee Bae, Neil Devadasan, Rajarshi Guha, Marlon Pierce, Xiaohong Qiu, Haixu Tang David Wild, Huapeng Yuan, George Chrysanthakopoulos, Henrik Frystyk Nielsen [Service Aggregated Linked Sequential Activities: High Performance Data Mining on Multi-core Systems](#) Poster at Microsoft Technical Computing All Hands Meeting March 6-7 2008
53. Geoffrey Fox [Cloud Computing](#) Birds of a Feather Overview at [OGF22](#) Hyatt Regency Cambridge February 27 2008
54. Geoffrey Fox discussing work with: Seung-Hee Bae, Neil Devadasan, Rajarshi Guha, Marlon Pierce, Xiaohong Qiu, David Wild, Huapeng Yuan, George Chrysanthakopoulos, Henrik Frystyk Nielsen [Robust High Performance Optimization for Clustering, Multi-Dimensional Scaling and Mixture Models](#) CGB Indiana University Lunchtime Talk January 22 2008
55. Geoffrey Fox and Marlon Pierce [Community Grids Laboratory work on Virtual Organizations](#) December 20 2007 Poster for NSF Virtual Organizations [Meeting](#) Washington DC January 14-16 2008
56. Geoffrey Fox [Cyberinfrastructure and e-Research \(e-Science\)](#) ([Longer](#) version) Presentation at Cyberinfrastructure Days at Elizabeth City State University North Carolina January 4 2008

----- **Presentations and Publications 2007** -----

2007 Journal Articles (published)

1. Geoffrey C. Fox and Hai Zhuge [Editorial for Special Issue of the 2nd International Conference on Semantics, Knowledge and Grid](#) Concurrency and Computation: Practice and Experience Special Issue for 2nd International Conference on Semantics, Knowledge and Grid [SKG2006](#) Guilin China October 31 - November 3 2006
2. Marlon E. Pierce Geoffrey C. Fox Mehmet S. Aktas Galip Aydin Harshawardhan Gadgil Zhigang Qi and Ahmet Sayar [The QuakeSim Project: Web Services for Managing Geophysical Data and Applications](#) PAGEOPH Special Issue for 5th ACES International Workshop Maui Prince Hotel, Island of Maui, Hawaii
3. Sang Boem Lim, Han-Ku Lee, Bryan Carpenter, and Geoffrey Fox [Runtime Support for Scalable Programming in Java](#) in Journal of Supercomputing Special Issue from Third International [Symposium](#) on Parallel and Distributed Processing and Applications ([ISPA'05](#)), Nanjing , China November 2-5 2005 [DOI](#)
4. Yolanda Gil, Ewa Deelman, Mark Ellisman, Thomas Fahringer, Geoffrey Fox, Dennis Gannon, Carole Goble, Miron Livny, Luc Moreau, Jim Myers [Report on the 2006 NSF Workshop on Challenges of Scientific Workflows](#) Computer, vol. 40, no. 12, pp. 24-32, Dec., 2007. [DOI](#). See original [meeting](#)
5. Jack Dongarra, Dennis Gannon, Geoffrey Fox, and Ken Kennedy [The Impact of Multicore on Computational Science Software](#) Technical Report February 5 2007; [CTWatch](#) Quarterly Volume 3, Number 1 February 2007
6. Sangyoon Oh and Geoffrey Fox [Optimizing Web Service Messaging Performance in Mobile Computing](#) July 2006, Published in Special Issue in Grid Technology and applications of Journal Of Future Generation Computer Systems, Elsevier, Volume 23, Issue 4, May 2007, Pages 623-632 [DOI](#)

7. Mehmet Aktas, Galip Aydin, Andrea Donnellan, Geoffrey Fox, Robert Granat , Lisa Grant, Greg Lyzenga, Dennis McLeod, Shrideep Pallickara, Jay Parker, Marlon Pierce, John Rundle, Ahmet Sayar, and Terry Tullis [iSERVO: Implementing the International Solid Earth Research Virtual Observatory by Integrating Computational Grid and Geographical Information Web Services](#) Technical Report December 2004, Published in Special Issue of Pure and Applied Geophysics (PAGEOPH) for Beijing July 2004 ACES [Meeting](#), Volume 163, Numbers 11-12 / December, 2006 [DOI](#)
8. Andrea Donnellan, John Rundle, Geoffrey Fox, Dennis McLeod, Lisa Grant, Terry Tullis, Marlon Pierce, Jay Parker, Greg Lyzenga, Robert Granat , Margaret Glasscoe [QuakeSim and the Solid Earth Research Virtual Observatory](#) with [Previous version](#) Published in Special Issue of Pure and Applied Geophysics (PAGEOPH) for Beijing July 2004 ACES [Meeting](#), Volume 163, Numbers 11-12 / December, 2006 [DOI](#)
9. Geoffrey Fox and Xiaoping Sun, [Progress of the Knowledge Grid](#) Editorial for special issue for 1st International [Conference](#) SKG2005 on Semantics, Knowledge and Grid Beijing China November 27-29 2005 published in Special Issue: *Progress of the Knowledge Grid in Concurrency and Computation: Practice and Experience* Volume 19, Issue 15, Date: October 2007, Pages: 2011-2012 [DOI](#)
10. Mehmet S. Aktas, Geoffrey C. Fox, Marlon Pierce [Fault Tolerant High Performance Information Services for Dynamic Collections of Grid and Web Services](#) FGCS Special issue from 1st International [Conference](#) SKG2005 on *Semantics, Knowledge and Grid* Beijing China November 27-29 2005 in *Future Generation Computer Systems* Volume 23 (3), p.317-337, Mar 2007 [DOI](#)
11. Geoffrey Fox and Hai Zhuge [GCC2005 Special Issue on Autonomous Grid Computing](#) Fourth International Conference on Grid and Cooperative Computing ([GCC2005](#)), held in Beijing, China, during Nov 30-Dec 3, 2005. Editorial for Special Issue: *Autonomous Grid Computing, Concurrency and Computation: Practice and Experience* Volume 19, Issue 7, Date: May 2007, Pages: 943-944 [DOI](#)
12. Geoffrey Fox, Galip Aydin, Hasan Bulut, Harshawardhan Gadgil, Shrideep Pallickara, Marlon Pierce, and Wenjun Wu [Management of Real-Time Streaming Data Grid Services](#) March 12 2006. Special Issue from Grid and Cooperative Computing 4th International [Conference](#) November 30 to December 3 2005 Beijing China. *Concurrency and Computation: Practice and Experience* Volume 19, Issue 7, Date: May 2007, Pages: 983-998 [DOI](#)
13. Jay Alameda, Marcus Christie, Geoffrey Fox, Joe Futrelle, Dennis Gannon, Mihael Hategan, Gregor von Laszewski, Mehmet A. Nacar, Marlon Pierce, Eric Roberts, Charles Severance, and Mary Thomas [The Open Grid Computing Environments Collaboration: Portlets and Services for Science Gateways](#) March 2006. Special Issue for Science Gateways GGF14 [workshop](#). *Concurrency and Computation: Practice and Experience* Volume 19, Issue 6, Date: 25 April 2007, Pages: 921-942 [DOI](#)
14. Mehmet A. Nacar, Mehmet S. Aktas, Marlon Pierce, Zhenyu Lu and Gordon Erlebacher, Dan Kigelman, Evan F. Bollig, Cesar De Silva, Benny Sowell, and David A. Yuen [VLab: Collaborative Grid Services and Portals to Support Computational Material Science](#) Dec 30, 2005 Special Issue on Grid Portals based on SC05 [GCE'05 Workshop](#), *Concurrency and Computation: Practice and Experience* Volume 19, Issue 12, Date: 25 August 2007, Pages: 1717-1728 [DOI](#)

2007 Journal Articles (accepted but not in print)

1. Shrideep Pallickara, Hasan Bulut and Geoffrey Fox [Fault-Tolerant Reliable Delivery of Messages in Distributed Publish/Subscribe Systems](#) to appear in International Journal of Autonomic Computing 2008
2. Galip Aydin, Ahmet Sayar, Harshawardhan Gadgil, Mehmet S. Aktas, Geoffrey C. Fox, Sunghoon Ko, Hasan Bulut, and Marlon E. Pierce [Building and Applying Geographical Information System Grids](#) 12 January 2006, Special Issue on Geographical information Systems and Grids based on GGF15 [workshop](#), Concurrency and Computation: Practice and Experience, to be published
3. Shrideep Pallickara, Geoffrey Fox and Harshawardhan Gadgil. On the Secure Creation, [Organization and Discovery of Topics in Distributed Publish/Subscribe Systems](#). (To appear) International Journal of High Performance Computing and Networking (IJHPCN). Special Issue of extended versions of the 6 best papers at the ACM/IEEE GRID 2005 Workshop.
4. Sang Boem Lim, Geoffrey Fox, Ali Kaplan, Shrideep Pallickara and Marlon Pierce [GridFTP and Parallel TCP Support in NaradaBrokering](#) Special Issue of selected papers from the Sixth International Conference on Algorithms and Architectures for Parallel Processing. Future Generation Computer Systems
5. Geoffrey C. Fox, Mehmet S. Aktas, Galip Aydin, Harshawardhan Gadgil, Shrideep Pallickara, Marlon E. Pierce, and Ahmet Sayar [Algorithms and the Grid](#) August 2005 talk at [ALGORITHM 2005](#) Conference on Scientific Computing Vysoke Tatry, Podbanske March 13-18, 2005. Paper to be published in a regular issue of the Springer mathematical journal Computing and Visualization in Science (CVS). [DOI\(pending\)](#)

2007 Book Chapters

1. Marlon E. Pierce, Geoffrey Fox, Huapeng Yuan, and Yu Deng [Cyberinfrastructure and Web 2.0](#) Proceedings of [HPC2006](#) July 4 2006 Cetraro Italy
2. Geoffrey C. Fox, Rajarshi Guha, Donald F. McMullen, Ahmet Fatih Mustacoglu, Marlon E. Pierce, Ahmet E. Topcu, and David J. Wild [Web 2.0 for Grids and e-Science](#) INGRID 2007 - Instrumenting the Grid 2nd International [Workshop](#) on Distributed Cooperative Laboratories - S.Margherita Ligure Portofino, ITALY, April 18 2007
3. Shrideep Pallickara, Geoffrey Fox, Mehmet Aktas, Harshawardhan Gadgil, Beytullah Yildiz, Sangyoon Oh, Sima Patel, Marlon Pierce and Damodar Yemme [A Retrospective on the Development of Web Service Specifications](#) December 2006. Chapter in Book *Securing Web Services: Practical Usage of Standards and Specifications*. Editor Periorellis Panos, University of Newcastle Upon Tyne. Publisher: IGI Global November 1 2007. ISBN-10: 1599046393; ISBN-13: 978-1599046396

2007 Conference Papers

1. Marlon E. Pierce, Geoffrey C. Fox, Galip Aydin, Zhigang Qi, Andrea Donnellan, Jay Parker and Robert Granat [QuakeSim: Web Services, Portals, and Infrastructure for Geophysics](#) December 19 2007 to be published in 2008 IEEE Aerospace [Conference](#) March 1-8 2008, Big Sky MT
2. Andrea Donnellan, Jay Parker, Robert Granat, Geoffrey Fox, Marlon Pierce, John Rundle, Dennis McLeod, Rami Al-Ghanmi, Lisa Grant, Walter Brooks [QuakeSim: Efficient Modeling of Sensor Web Data in a Web Services Environment](#) November 30 2007 to be published in 2008 IEEE Aerospace [Conference](#) March 1-8 2008, Big Sky MT

3. Xiaohong Qiu, Geoffrey Fox, H. Yuan, Seung-Hee Bae, George Chrysanthakopoulos, Henrik Frystyk Nielsen [High Performance Multi-Paradigm Messaging Runtime Integrating Grids and Multicore Systems](#) (updated from [original](#)) September 23 2007 to be published in proceedings of eScience 2007 [Conference](#) Bangalore India December 10-13 2007
4. Geoffrey Fox, Seung-Hee Bae, Rajarshi Guha, Marlon E. Pierce, Xiaohong Qiu, David J. Wild , H. Yuan [High Performance Robust Datamining for Cheminformatics](#) PAPER ID: 1168842 at Division of Chemical Information session on *Cheminformatics: From Teaching to Research* Tuesday, April 8, 2008 from 11:35 AM to 12:00 PM at Spring 2008 American Chemical Society National [Meeting & Exposition](#) Sunday, April 6 — Thursday, April 10, 2008 New Orleans, LA USA
5. Rajarshi Guha, Geoffrey Fox, Kevin E. Gilbert, Marlon Pierce and David Wild [I don't care where my data and methods are: A web-service approach for distributed access to methods, data and models.](#) PAPER ID: 1170920 at Division of Chemical Information session on *Cheminformatics: From Teaching to Research* Tuesday, April 8, 2008 at Spring 2008 American Chemical Society National [Meeting & Exposition](#) Sunday, April 6 — Thursday, April 10, 2008 New Orleans, LA USA
6. Mehmet A. Nacar, Marlon E. Pierce, Andrea Donnellan, Geoffrey C. Fox [Building QuakeSim Portlets with GTLAB](#) Paper at [GCE07](#) Workshop November 11-12 2007 at [SC07](#) Reno Nevada
7. Ali Kaplan, Geoffrey C. Fox, Gregor von Laszewski [GridTorrent Framework: A High-performance Data Transfer and Data Sharing Framework for Scientific Computing](#) Paper at [GCE07](#) Workshop November 11-12 2007 at [SC07](#) Reno Nevada
8. Geoffrey Fox, Seung-Hee Bae, Rajarshi Guha, Marlon E. Pierce, Xiaohong Qiu, David J. Wild , H. Yuan, Neil M Devadasan, George Chrysanthakopoulos, Henrik Frystyk Nielsen [Parallel Clustering in a Cheminformatics Grid](#) The 2007 Microsoft eScience [Workshop](#) at RENCi (The Friday Center for Continuing Education UNC - Chapel Hill 100 Friday Center Drive Chapel Hill, NC 27599-1020) October 21-23 2007
9. Geoffrey C. Fox, Marlon E. Pierce, Ahmet Fatih Mustacoglu, and Ahmet E. Topcu [Web 2.0 for E-Science Environments](#) Keynote Presentation at 3rd International Conference on Semantics, Knowledge and Grid [SKG2007](#) Xian China October 28-30 2007
10. Mehmet A. Nacar, Marlon E. Pierce, Geoffrey C. Fox [GTALAB: Grid Tag Libraries Supporting Workflows within Science Gateways](#) 3rd International Conference on Semantics, Knowledge and Grid [SKG2007](#) Xian China October 28-30 2007
11. Ahmet E. Topcu , Ahmet Fatih Mustacoglu, Geoffrey Fox , Aurel Cami [Integration of Collaborative Information Systems in Web 2.0](#) 3rd International Conference on Semantics, Knowledge and Grid [SKG2007](#) Xian China October 28-30 2007
12. Xiaohong Qiu, Geoffrey Fox, H. Yuan, Seung-Hee Bae, George Chrysanthakopoulos, Henrik Frystyk Nielsen [Performance of a Multi-Paradigm Messaging Runtime on Multicore Systems](#) Abstract of Poster at Grid 2007 [Conference](#), Omni Austin Downtown Hotel Austin Texas, September 19 2007
13. Donnellan, Andrea (JPL), John Rundle (UC Davis), Lisa Grant (UC Irvine), Dennis McLeod (USC), Geoffrey Fox (Indiana U), Marlon Pierce (Indiana U), Terry Tullis (Brown U), Walt Brooks (NASA Ames), Jay Parker (JPL), and Robert Granat (JPL) [Abstract](#) for 2007 SCEC Annual [Meeting](#), September 9-12 at the Palm Springs Hilton Hotel in Palm Springs, California.

14. Shrideep Pallickara, Hasan Bulut, and Geoffrey Fox. [Fault-Tolerant Reliable Delivery of Messages in Distributed Publish/Subscribe Systems](#) . Proceedings of the 4th IEEE International [Conference](#) on Autonomic Computing. Jacksonville, Florida. June 12-15 2007
15. Yili Gong, Marlon E. Pierce, and Geoffrey C. Fox [Matchmaking Scientific Workflows in Grid Environments](#) Proceedings of IASTED International [Conference](#) on Parallel and Distributed Computing and Systems (PDCS 2007), November 19 - 21, 2007, at Cambridge, USA
16. Harshawardhan Gadgil, Geoffrey Fox, Shrideep Pallickara, Marlon Pierce [Scalable, Fault-tolerant Management of Grid Services](#) to appear in Proceedings of [IEEE Cluster 2007](#)
17. Andrea Donnellan, Jay Parker, Charles Norton, Gregory Lyzenga, Margaret Glasscoe, Geoffrey Fox, Marlon Pierce, John Rundle, Dennis McLeod, Lisa Grant, Walter Brooks and Terry Tullis [QuakeSim: Enabling Model Interactions in Solid Earth Science Sensor Webs](#) NASA Science Technology [Conference](#) NSTC 2007 University of Maryland June 19-21 2007
18. Xiaohong Qiu [Multi-Paradigm Run Time MPR for Multicore Systems](#) Position Paper for Microsoft Multicore Computing Workshop Seattle June 20-21 2007
19. Zao Liu, Marlon E. Pierce, and Geoffrey C. Fox [Implementing a Caching and Tiling Map Server: a Web 2.0 Case Study](#) Proceedings of The 2007 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2007)
20. Ahmet Fatih Mustacoglu, Ahmet E. Topcu Aurel Cami, Geoffrey Fox [A Novel Event-Based Consistency Model for Supporting Collaborative Cyberinfrastructure Based Scientific Research](#) Proceedings of The 2007 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2007)
21. Galip Aydin, Zhigang Qi, Marlon E. Pierce, Yehuda Bock, and Geoffrey C. Fox [Building a Sensor Grid for Real Time Global Positioning System Data](#) Proceedings of [Workshop](#) on Principles of Pervasive Information Systems Design Sunday, May 13, 2007 In conjunction with [Pervasive 2007](#) Toronto, Ontario, Canada
22. Ahmet Fatih Mustacoglu, and Geoffrey Fox [AJAX Integration Approach for Collaborative Calendar-Server Web Services](#) Proceedings of The 2007 World [Congress](#) in Computer Science, Computer Engineering, & Applied Computing Las Vegas, Nevada, USA (June 25-28, 2007)
23. Harshawardhan Gadgil, Geoffrey Fox, Shrideep Pallickara [Scalable, Fault-tolerant Management in a Service Oriented Architecture](#) Poster in pages 235-236 of proceedings for IEEE International [Symposium](#) in High-Performance Distributed Computing (HPDC) Monterey California June 27-29 2007
24. Mehmet A. Nacar, Jong Y. Choi, Marlon E. Pierce, and Geoffrey C. Fox [Building a Grid Portal for Teragrid's Big Red](#) Proceedings of TeraGrid 2007 [Conference](#) Madison Wisconsin June 4-8 2007
25. Richard A. Aló, Karl Barnes, Diane Baxter, Geoffrey Fox, Al Kuslikis, and Alex Ramirez [Advances in the MSI Community and the MSI CyberIn-frastructure Empowerment Coalition \(MSI-CIEC\)](#) Proceedings of TeraGrid 2007 [Conference](#) Madison Wisconsin June 4-8 2007
26. Linda Hayden, Geoffrey Fox, and Prasad Gogineni [Cyberinfrastructure for Remote Sensing of Ice Sheets](#) Proceedings of TeraGrid 2007 [Conference](#) Madison Wisconsin June 4-8 2007
27. Geoffrey Fox, Ahmet Fatih Mustacoglu, Ahmet E. Topcu, Aurel Cami [SRG: A Digital Document-Enhanced Service Oriented Research Grid](#) April 7 2007 accepted for IEEE

International [Conference](#) on Information Reuse and Integration (IEEE IRI-2007) August 13 - 15, 2007 Las Vegas, USA

2007 Technical Reports (or submitted and under review)

1. Geoffrey Fox, Marlon Pierce and Shrideep Pallickara [Summary of CGL Lab Activities January-December 2007](#) Technical Report December 31 2007
2. Geoffrey Fox and Marlon Pierce [Grids meet Too much Computing, Too much Data and never Too much Simplicity](#) White Paper December 27 2007
3. Byounghoon Lee, Sunghwa Lim, Jai-Hoon Kim , and Geoffrey Fox [Lease Based Consistency Scheme in the Web Environment](#) Technical Report December 27 2007
4. Geoffrey Fox and Marlon Pierce [Grids Challenged by a Web 2.0 and Multicore Sandwich](#) Technical Report December 26 2007
5. Marlon Pierce et al [Open Grid Computing Environments \(OGCE\) Annual Report: September 1, 2003-August 31, 2007](#) prepared December 2007
6. Mehmet S. Aktas, Geoffrey C. Fox, Marlon Pierce [Distributed High Performance Grid Information Service](#) Technical Report December 2007
7. Mehmet S. Aktas, Geoffrey C. Fox, Marlon Pierce [Information Federation in Grid Information Services](#) Technical Report December 2007
8. Jaliya Ekanayake, Shrideep Pallickara and Geoffrey Fox [A Scalable Framework for the Collaborative Analysis of Scientific Data](#) Technical Report December 12 2007 submitted to CCGrid Doctoral Symposium
9. A. Sayar, G. C. Fox, M. Pierce [Supporting Event-based Unified Data Access/query over Integrated Data-views for Decision Making in Geographic Information Systems](#) Technical Report December 1 2007
10. Xiaohong Qiu, Geoffrey C. Fox, Huapeng Yuan, Seung-Hee Bae, George Chrysanthakopoulos, Henrik Frystyk Nielsen [Performance of Multicore Systems on Parallel Datamining Services](#) Technical report Noveber 19 2007 subitted to CCGrid08
11. Ahmet Fatih Mustacoglu and Geoffrey Fox [Hybrid Consistency Framework for Distributed Annotation Records](#) Technical Report October 30 2007
12. Milan Jovovic, Geoffrey Fox [Multi-dimensional data scaling – dynamical cascade approach](#) Technical Report September 26 2007
13. Ahmet E. Topcu , Ahmet Fatih Mustacoglu, Geoffrey Fox , Aurel Cami [Integration of Collaborative Information Systems in Web 2.0](#) Technical report June 27 2007
14. Mehmet A. Nacar, Marlon E. Pierce, Geoffrey C. Fox [GTLAB: Grid Tag Libraries Supporting Workflows within Science Gateways](#) Technical report June 20 2007
15. Rajarshi Guha, Gary D. Wiggins, David J. Wild, Mu-Hyun Baik, Marlon E. Pierce, and Geoffrey C. Fox [Improving usability and accessibility of cheminformatics tools for chemists through cyberinfrastructure and education](#) Technical Report April 18 2007
16. Mehmet A. Nacar, Marlon E. Pierce, Geoffrey C. Fox [Extending GTLAB Tag Libraries for Grid Workflows](#) Technical Report April 18 2007
17. Xiaohong Qiu, Geoffrey Fox, George Chrysanthakopoulos, Henrik Frystyk Nielsen [High Performance Multi-Paradigm Messaging Run Time on Multicore Systems](#) Technical Report April 16 2007
18. Xiaohong Qiu, Geoffrey Fox, Alex Ho [Analysis of Concurrency and Coordination Runtime CCR and DSS for Parallel and Distributed Computing](#) Technical Report January 21 2007

2007 Meetings and Presentations

1. Geoffrey Fox, Huapeng Yuan, Seung-Hee Bae, Xiaohong Qiu , George Chrysanthakopoulos, Henrik Frystyk Nielsen [High Performance Multi-Paradigm Messaging Runtime Integrating Grids and Multicore Systems](#) eScience 2007, the 3rd IEEE International [Conference](#) on e-Science and Grid Computing Bangalore India December 13 2007
2. Chris Smith, VP of Standards, OGF Presented with small modifications by Geoffrey Fox [Building Blocks for the Grid](#) OGF Workshop at eScience 2007, the 3rd IEEE International [Conference](#) on e-Science and Grid Computing Bangalore India December 10 2007
3. Geoffrey Fox [Web 2.0, Grids and Parallel Computing](#) Oxford e-Science Centre December 7 2007
4. Geoffrey Fox [Cyberinfrastructure and Scientific Collaboration](#) Science and Technology in the Pacific Century (STIP) East Asian Colloquium, sponsored by the East Asian Studies Center Indiana University Ballantine Hall 004, November 30 2007
5. Geoffrey Fox [Net-Centric Sensor Grids](#) Presentation Indiana University November 27 2007
6. Yili Gong, Marlon E. Pierce and Geoffrey C. Fox [Matchmaking Scientific Workflows in Grid Environments](#) Presentation at IASTED International [Conference](#) on Parallel and Distributed Computing and Systems (PDCS 2007), November 19 - 21, 2007, at Cambridge, USA
7. Geoffrey Fox, Huapeng Yuan, Seung-Hee Bae, Xiaohong Qiu , George Chrysanthakopoulos, Henrik Frystyk Nielsen [Multicore Salsa: Parallel Programming 2.0](#) Booth Presentation at [SC07](#) 2007 Reno Nevada November 14 2007
8. Shrideep Pallickara, Jaliya Ekanayake, Geoffrey Fox [Collaborative Analysis of Distributed Data Applied to Particle Physics Experiments](#) Booth Presentation at [SC07](#) 2007 Reno Nevada November 13 2007
9. Geoffrey C. Fox and Marlon E. Pierce [Web 2.0 for eScience: SC07 Education Program Tutorial](#) Education Program Tutorial at [SC07](#) November 12 2007 Reno Nevada
10. Ali Kaplan, Geoffrey C. Fox and Gregor von Laszewski [GridTorrent Framework: A High-performance Data Transfer and Data Sharing Framework for Scientific Computing](#) Presentation at [GCE07](#) Portal Workshop at [SC07](#) 2007 Reno Nevada November 11 2007
11. Mehmet A. Nacar, Marlon E. Pierce, Andrea Donnellan, and Geoffrey C. Fox [Building QuakeSim portlets with GTLAB](#) Presentation at [GCE07](#) Portal Workshop at [SC07](#) 2007 Reno Nevada November 11 2007
12. Geoffrey C. Fox [Research Strategies](#) Presentation at Chinese Academy of Sciences, Beijing China November 2 2007
13. Geoffrey C. Fox and Marlon E. Pierce [Web 2.0 for E-Science Environments](#) Presentation at Chinese Academy of Sciences, Beijing China November 2 2007
14. Geoffrey Fox [Web 2.0, Grids and Parallel Computing](#) Tsiunghua University at Tsinghua National Laboratory for Information Science and Technology, Beijing November 1 2007
15. Geoffrey Fox, Huapeng Yuan, Seung-Hee Bae, Xiaohong Qiu , George Chrysanthakopoulos, Henrik Frystyk Nielsen [Multicore Salsa: Parallel Programming 2.0](#) Peking University Computer Science Department Beijing November 1 2007
16. Mehmet A. Nacar, Marlon E. Pierce, and Geoffrey C. Fox (presenter) [GTLAB: Grid Tag Libraries Supporting Workflows within Science Gateways](#) Presentation at 3rd International Conference on Semantics, Knowledge and Grid [SKG2007](#) Xian China October 30 2007

17. Geoffrey C. Fox and Marlon E. Pierce [Web 2.0 for E-Science Environments](#) Keynote Presentation at 3rd International Conference on Semantics, Knowledge and Grid [SKG2007](#) Xian China October 29 2007
18. Geoffrey Fox, Seung-Hee Bae, Rajarshi Guha, Marlon E. Pierce, Xiaohong Qiu, David J. Wild, H. Yuan, Neil M Devadasan, George Chrysanthakopoulos, Henrik Frystyk Nielsen [Multicore SALSA: Parallel Computing and Web 2.0 for Cheminformatics and GIS Analysis](#) The 2007 Microsoft eScience [Workshop](#) at RENCI (The Friday Center for Continuing Education UNC - Chapel Hill 100 Friday Center Drive Chapel Hill, NC 27599-1020) October 21-23 2007
19. Chris Dabrowski and Geoffrey Fox [Research Group Meeting on Reliability and Robustness in Grid Computing Systems](#) Open Grid Forum [OGF21](#) Seattle Washington October 17 2007
20. Geoffrey Fox [OGF eScience Function](#) Open Grid Forum Board Presentation, [OGF21](#) Seattle Washington October 17 2007
21. Geoffrey Fox [PolarGrid](#) Open Grid Forum Presentation, [OGF21](#) Seattle Washington October 16 2007
22. Geoffrey Fox [Panel Questions](#) for Web 2.0 and Grids Panel at Open Grid Forum Web 2.0 Workshop, [OGF21](#) Seattle Washington October 16 2007
23. Geoffrey Fox, Aurel Cami, Ahmet Fatih Mustacoglu, Ahmet E. Topcu [Semantic Research Grid](#) Open Grid Forum Web 2.0 Workshop, [OGF21](#) Seattle Washington October 15 2007
24. Geoffrey Fox, Huapeng Yuan, Seung-Hee Bae, Xiaohong Qiu, George Chrysanthakopoulos, Henrik Frystyk Nielsen [Multicore Salsa: Parallel Computing and Web 2.0](#) Open Grid Forum Web 2.0 Workshop, [OGF21](#) Seattle Washington October 15 2007
25. Geoffrey Fox [Cyberinfrastructure Technologies and Applications](#) Keynote presentation at [summit](#) *Cyberinfrastructure: Innovation At Work* at Banff Springs Hotel, Banff Canada October 11 2007
26. Xiaohong Qiu, Geoffrey Fox, H. Yuan, Seung-Hee Bae, George Chrysanthakopoulos, Henrik Frystyk Nielsen [Performance Measurements of CCR and MPI on Multicore Systems](#) Summary September 23 2007
27. Geoffrey Fox [The two faces of Cyberinfrastructure: Grids \(or Web 2.0\) and Supercomputing: What is their future, which is brighter and how can both communities benefit from each other?](#) Moderator of Panel at Grid 2007 [Conference](#), Omni Austin Downtown Hotel Austin Texas, September 19 2007
28. Xiaohong Qiu, Geoffrey Fox, H. Yuan, Seung-Hee Bae, George Chrysanthakopoulos, Henrik Frystyk Nielsen [Performance of a Multi-Paradigm Messaging Runtime on Multicore Systems](#) Poster at Grid 2007 [Conference](#), Omni Austin Downtown Hotel Austin Texas, September 19 2007
29. Harshawardhan Gadgil, Geoffrey Fox, Shrideep Pallickara, Marlon Pierce [Scalable, Fault-tolerant Management of Grid Services](#) Cluster 2007 [Conference](#), Omni Austin Downtown Hotel Austin Texas, September 18 2007
30. Geoffrey Fox [Computational Infrastructure for Policy Informatics](#) Workshop on Policy Informatics in an Interdependent World, Washington DC September 13 2007
31. Ahmet E. Topcu Ahmet Fatih Mustacoglu Geoffrey C. Fox and Aurel Cami [SRG: A Digital Document-Enhanced Service Oriented Research Grid](#) IEEE International [Conference](#) on Information Reuse and Integration (IEEE IRI-2007) August 13 - 15, 2007 Las Vegas, USA
32. Geoffrey Fox [Grids and Web 2.0 supporting eScience](#) STEM Scholars Seminar Indiana University Memorial Union August 1 2007

33. Geoffrey Fox, Marlon Pierce , Rui Wang and Alex Ho [Collaboration Grid work at Anabas and Community Grids Laboratory](#) SAIC Project Review at Indiana University Bloomington, July 30 2007
34. Geoffrey Fox, Richard Alo, Karl Barnes, Diane Baxter, Julie Foertsch, Al Kuslikis, Alex Ramirez [MINORITY SERVING INSTITUTIONS CYBERINFRASTRUCTURE INSTITUTE \(MSI-CII\)](#) Poster at Cyberinfrastructure - Training, Education, and Mentoring (CI-TEAM) Community [Workshop](#) July 9-11 2007, The Fairmont Washington, D.C 2401 M Street, NW Washington, District of Columbia, US 20037
35. Richard Alo, Karl Barnes, Diane Baxter, Geoffrey Fox, Al Kuslikis, Alex Ramirez [MINORITY SERVING INSTITUTIONS CYBERINFRASTRUCTURE EMPOWERMENT COALITION \(MSI-CIEC\)](#) Poster at Cyberinfrastructure - Training, Education, and Mentoring (CI-TEAM) Community [Workshop](#) July 9-11 2007, The Fairmont Washington, D.C 2401 M Street, NW Washington, District of Columbia, US 20037
36. Harshawardhan Gadgil, Geoffrey C. Fox, Shrideep Pallickara, Marlon Pierce [Scalable, Fault-tolerant Management in Service Oriented Architecture](#) Poster at The 16th IEEE International [Symposium](#) on High Performance Distributed Computing Monterey California June 27 2007
37. Geoffrey Fox [Application Panel MANYCORE Computing 2007](#) at Manycore Computing [Workshop](#) June 20 and 21, 2007 Crowne Plaza Hotel, 1113 Sixth Avenue, Seattle, WA
38. Shrideep Pallickara, Hasan Bulut, and Geoffrey Fox. [Fault-Tolerant Reliable Delivery of Messages in Distributed Publish/Subscribe Systems](#) Presentation at the 4th IEEE International [Conference](#) on Autonomic Computing. Jacksonville, Florida. June 13 2007
39. Richard A. Aló, Presenter, Karl Barnes, NAFEO; Diane Baxter, SDSC; Al Kuslikis, AIHEC; Geoffrey Fox, Indiana University; Alex Ramirez, HACU. Shantuan Coleman, Director, MSI-CIEC; Julie Foertsch, Evaluator, Wisconsin [CI-TEAM Advances in the MSI Community and the MSI Cyber Infrastructure Empowerment Coalition MSI-CIEC](#) Presentation at TeraGrid 2007 [Conference](#) Madison Wisconsin June 6 2007
40. Dr. Linda Hayden, Dr. Geoffrey Fox and Dr. Prasad Gogineni [Cyberinfrastructure for Remote Sensing of Ice Sheets](#) Presentation at TeraGrid 2007 [Conference](#) Madison Wisconsin June 6 2007
41. Mehmet A. Nacar, Jong Youl Choi, Marlon Pierce, Geoffrey Fox [Building Grid Portals with OGCE: Big Red Portal and GTLAB](#) Presentation at TeraGrid 2007 [Conference](#) Madison Wisconsin June 5 2007
42. Geoffrey Fox [Linking Programming models between Grids, Web 2.0 and Multicore](#) Distributed Programming Abstractions [Workshop](#) NESC Edinburgh UK May 31 2007
43. Ahmet Fatih Mustacoglu, Ahmet E. Topcu, Aurel Cami and Geoffrey C. Fox [Event-Based Model for Reconciling Digital Entities](#) 2007 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2007) May 23 2007
44. Zao Liu, Marlon Pierce, Geoffrey Fox [Federated Web Map Cache Server: A “Web 2.0 Meets SOA” Case Study](#) 2007 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2007) May 23 2007
45. Geoffrey Fox and Marlon Pierce [Web 2.0 in a Web Services and Grid Context Part I: CTS2007 Web 2.0 Tutorial](#) Part I of Tutorial at 2007 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2007) May 21 2007
46. Marlon Pierce and Geoffrey Fox [Web 2.0 Tutorial: Part 2](#) Part II of Tutorial at 2007 International [Symposium](#) on Collaborative Technologies and Systems (CTS 2007) May 21 2007

47. Geoffrey Fox [Grids Challenged by a Web 2.0 and Multicore Sandwich](#) Seventh IEEE International [Symposium](#) on Cluster Computing and the Grid — CCGrid 2007, Key note Talk Rio de Janeiro Brazil May 15 2007
48. Geoffrey Fox [OGF eScience and OGF Software](#) OGF20 GFSG Presentation Manchester UK May 6 2007
49. Geoffrey Fox [Grid of Grids for Information Management](#) Presentation on SBIR Progress Dayton OH May 4 2007
50. Gary Wiggins for Geoffrey Fox [Indiana University Chemical Informatics and Cyberinfrastructure Collaboratory](#) April 30, 2007 at NIH MLSCN/ECCR [Meeting](#), April 30th - May 1st in Philadelphia, PA
51. Geoffrey Fox [Real Time, Web 2.0, and Grid Systems](#) INGRID 2007 - Instrumenting the Grid 2nd International [Workshop](#) on Distributed Cooperative Laboratories - S.Margherita Ligure Portofino, ITALY, April 18 2007
52. Geoffrey Fox [Computational Science and the School of Informatics at Indiana University IU/HBCU STEM Initiative](#) IUPUI April 11 2007 Geoffrey Fox
53. Geoffrey Fox [Lessons on Process and Standards in other science communities](#) presentation at [IMAG](#) Model Sharing Strategies Workshop at NIH April 10 2007
54. Shrideep Pallickara, Jaliya Ekanayake & Geoffrey Fox [A Scalable Approach for the Secure and Authorized Tracking of the Availability of Entities in Distributed Systems](#) Talk at the 21st IEEE International Parallel & Distributed Processing Symposium (IPDPS). Longbeach, California. 26-30 March 2007
55. Geoffrey Fox [Informatics and Particle Physics Experiments](#) lecture at [I573](#) Class March 27 2007
56. Geoffrey Fox [Applications and Runtime for multicore/manycore](#) Microsoft March 21 2007
57. Geoffrey Fox [Overview of Chemical Informatics and Cyberinfrastructure Collaboratory](#) Project Summary March 15 2007
58. Geoffrey Fox [Web 2.0 and Grids](#) Chicago Computation Institute Workshop March 4 2007
59. Geoffrey Fox [Summary](#) of Community Grids Laboratory work on multi-core chips March 1 2007
60. Geoffrey Fox [Parallel Computing 2007: Lessons for a Multicore Future from the Past](#) 4 lectures at Microsoft February 26-March 1 2007
61. Geoffrey Fox [Notes on Collaboration Grids](#) February 23 2007
62. Geoffrey Fox [Polar Grid](#) Minority-Serving Institutions Cyberinfrastructure Institute (MSICI2) Highlight February 9 2007
63. Geoffrey Fox [Navajo Technical College Grid](#) CI-TEAM Minority-Serving Institutions CyberInfrastructure Empowerment Coalition (MSI-CIEC) Highlight February 9 2007
64. David Wild and Geoffrey Fox [Cheminformatics and Cyberinfrastructure](#) Bioinformatics [Retreat](#) Bradford Woods Indiana February 3 2007
65. Harshawardhan Gadgil, Geoffrey Fox, Shrideep Pallickara, Marlon Pierce [Managing Grid and Web Services and their exchanged messages](#) at [OGF19](#) Workshop on Reliability and Robustness, Friday Center Chapel Hill NC January 31 2007
66. Geoffrey Fox [Web 2.0 and Grids](#) at [OGF19](#) Web 2.0 [Tutorial](#), Friday Center Chapel Hill NC January 29 2007
67. Zao Liu, Marlon Pierce (presenter), Sunghoon Ko, Geoffrey Fox, Neil Devadasan [Concurrent Web Map Cache Server: A "Web 2.0 Meets SOA" Case Study](#) at [OGF19](#) Web 2.0 [Tutorial](#), Friday Center Chapel Hill NC January 29 2007

68. Geoffrey Fox [eScience Function](#) at [OGF19](#) GFSG Meeting, Friday Center Chapel Hill NC January 28 2007
69. Geoffrey Fox [Global Grids Web 2.0 and Globalization](#) Informatics Colloquium Indiana University January 12 2007
70. Geoffrey Fox [Cyberinfrastructure across the Globe](#) Seminar to Indiana University Computer Science Honors Students January 8 2007

----- **Presentations and Publications 2006** -----

2006 Journal Articles (published)

1. Andrea Donnellan, John Rundle, Geoffrey Fox, Dennis McLeod, Lisa Grant, Terry Tullis, Marlon Pierce, Jay Parker, Greg Lyzenga, Robert Granat , Margaret Glasscoe [QuakeSim and the Solid Earth Research Virtual Observatory](#) with [Previous version](#) Published in Special Issue of Pure and Applied Geophysics (PAGEOPH) Volume 163, Numbers 11-12 / December, 2006 [DOI](#), for Beijing ACES [Meeting](#) July 2004
2. Mehmet Aktas, Galip Aydin, Andrea Donnellan, Geoffrey Fox, Robert Granat , Lisa Grant, Greg Lyzenga, Dennis McLeod, Shrideep Pallickara, Jay Parker, Marlon Pierce, John Rundle, Ahmet Sayar, and Terry Tullis [iSERVO: Implementing the International Solid Earth Research Virtual Observatory by Integrating Computational Grid and Geographical Information Web Services](#) Technical Report December 2004, Published in Special Issue of Pure and Applied Geophysics (PAGEOPH) Volume 163, Numbers 11-12 / December, 2006 [DOI](#), for Beijing ACES [Meeting](#) July 2004
3. Sangyoon Oh and Geoffrey Fox [Optimizing Web Service Messaging Performance in Mobile Computing](#) July 2006, Special Issue in Grid Technology and applications of Journal Of Future Generation Computer Systems, Elsevier, Volume 23, Issue 4, May 2007, Pages 623-632 [DOI](#).
4. Mehmet S. Aktas, Geoffrey C. Fox, Marlon Pierce [Fault Tolerant High Performance Information Services for Dynamic Collections of Grid and Web Services](#) FGCS Special issue from 1st International [Conference](#) SKG2005 on Semantics, Knowledge and Grid Beijing China November 27-29 2005; Future Generation Computer Systems Volume 23, Issue 3, March 2007, Pages 317-337 [DOI](#)
5. Geoffrey Fox and Xiaoping Sun, [Progress of the Knowledge Grid](#) Editorial for special issue for 1st International [Conference](#) SKG2005 on Semantics, Knowledge and Grid Beijing China November 27-29 2005 to be published in Concurrency and Computation: Practice and Experience 2007; available in early view [DOI](#)
6. Geoffrey Fox and Hai Zhuge [GCC2005 Special Issue on Autonomous Grid Computing](#) Fourth International Conference on Grid and Cooperative Computing ([GCC2005](#)), held in Beijing, China, during Nov 30-Dec 3, 2005. Editorial for special issue to be published in Concurrency and Computation: Practice and Experience; available in early view [DOI](#)
7. Geoffrey Fox, Galip Aydin, Hasan Bulut, Harshawardhan Gadgil, Shrideep Pallickara, Marlon Pierce, and Wenjun Wu [Management of Real-Time Streaming Data Grid Services](#), Concurrency and Computation: Practice and Experience 19, Vol 19, No. 7, pages 983-998 Special Issue from Grid and Cooperative Computing 4th International [Conference](#) November 30 to December 3 2005 Beijing China [DOI](#)
8. Jay Alameda, Marcus Christie, Geoffrey Fox, Joe Futrelle, Dennis Gannon, Mihael Hategan, Gregor von Laszewski, Mehmet A. Nacar, Marlon Pierce, Eric Roberts, Charles Severance,

and Mary Thomas [The Open Grid Computing Environments Collaboration: Portlets and Services for Science Gateways](#) March 2006 Concurrency and Computation: Practice and Experience Volume 19, Issue 6, Pages 921-942, Special Issue for Science Gateways GGF14 [workshop DOI](#)

9. Dennis Gannon and Geoffrey Fox [Workflow in Grid Systems](#) Editorial of special issue of Concurrency&Computation: Practice&Experience based on GGF10 Berlin [meeting](#); Concurrency and Computation: Practice & Experience Volume 18, Issue 10 (August 2006) Pages: 1009 – 1019, 2006; [DOI](#)
10. Wenjun Wu, Geoffrey Fox, Hasan Bulut, Ahmet Uyar, Tao Huang [Service Oriented Architecture for VoIP conferencing](#) Special Issue on Voice over IP - Theory and Practice of the International Journal of Communication Systems Volume 19, Issue 4 , Pages 445 – 461 Edited by John Fox, P. Gburzynski. [DOI](#)
11. M P Thomas, J Burruss, L Cinquini, G Fox, D Gannon, L Gilbert, G von Laszewski, K Jackson, D Middleton, R Moore, M Pierce, B Plale, A Rajasekar, R Regno, E Roberts, D Schissel, A Seth and W Schroeder, [Grid portal architectures for scientific applications](#) SciDAC 2005, SCIENTIFIC DISCOVERY THROUGH ADVANCED COMPUTING 26–30 June 2005, San Francisco, CA, USA. Journal of Physics Volume 16, 2005 , Pages 596-600

2006 Book Chapters

1. Ahmet Uyar, Wenjun Wu, Hasan Bulut, Geoffrey Fox [Service-Oriented Architecture for Building a Scalable Videoconferencing System](#) March 25 2006 to appear in book "Service-Oriented Architecture - Concepts & Cases" published by Institute of Chartered Financial Analysts of India (ICFAI) University

2006 Conference Papers

1. Shrideep Pallickara, Jaliya Ekanayake, Geoffrey Fox, [A Scalable Approach for the Secure and Authorized Tracking of the Availability of Entities in Distributed Systems](#). (To appear) Proceedings of the 21st IEEE International Parallel & Distributed Processing [Symposium](#) (IPDPS 2007). Long Beach, California.
2. Mehmet Nacar, Marlon Pierce, Gordon Erlebacher, Geoffrey Fox. [Designing Grid Tag Libraries and Grid Beans](#) Second International [Workshop](#) on Grid Computing Environments GCE06 at SC06, Tampa, FL. Nov. 12-13 2006
3. Hao Yin, Sofia Brenes-Barahona, Donald F. McMullen, Marlon Pierce, Kianosh Huffman, Geoffrey Fox, [A PERMIS-based Authorization Solution between Portlets and Back-end Web Services](#) . Second International [Workshop](#) on Grid Computing Environments GCE06 at SC06, Tampa, FL. Nov. 12-13 2006
4. Mehmet S. Aktas, Sangyoon Oh, Geoffrey C. Fox, and Marlon E. Pierce [XML Metadata Services](#) Proceedings of [SKG2006](#) Guilin China October 31 - November 3 2006.
5. Fang Juan, Geoffrey Fox, Marlon Pierce [Grid Portal System Based on GPIR](#) Proceedings of [SKG2006](#) Guilin China October 31 - November 3 2006.
6. Shrideep Pallickara, Marlon Pierce, Harshawardhan Gadgil, Geoffrey Fox, Yan Yan, Yi Huang. [A Framework for Secure End-to-End Delivery of Messages in Publish/Subscribe Systems](#). Proceedings of the 7th IEEE/ACM International [Conference](#) on Grid Computing (GRID 2006). Barcelona, Spain; September 28th-29th 2006.
7. Hao Yin, Donald F. McMullen, Mehmet A. Nacar, Marlon Pierce, Kianosh Huffman, Geoffrey Fox and Yu Ma [Providing Portlet-Based Client Access to CIMA-Enabled](#)

- [Crystallographic Instruments, Sensors, and Data](#) Technical Report April 21 2006 with short [poster version](#) for 7th IEEE/ACM International Conference on Grid Computing (GRID 2006). Barcelona, Spain.
8. Galip Aydin, Geoffrey C. Fox, Harshawardhan Gadgil and Marlon E. Pierce [Streaming Data Services to Support Archival and Real-Time Geographical Information System Grids](#) Sixth Annual NASA Earth Science Technology Conference June 27th - 29th College Park, MD
 9. Richard Alo, Karl Barnes, Diane Baxter, Geoffrey Fox, Al Kuslikis, Calvin Lowe, Alex Ramirez, Selena Singleton [MSI-CIEC: MSI Cyberinfrastructure Empowerment Coalition and the TeraGrid \(Abstract\)](#) [TeraGrid '06](#) Indianapolis IN June 12-15 2006
 10. Harshawardhan Gadgil, Geoffrey Fox, Shrideep Pallickara and Marlon Pierce [Managing Grid Messaging Middleware](#) Proceedings of IEEE Conference on the Challenges of Large Applications in Distributed Environments ([CLADE](#)) Paris France June 19 2006, pp. 83 - 91 [DOI](#)
 11. Sangyoon Oh, Mehmet S. Aktas, Marlon Pierce, Geoffrey C. Fox [Optimizing Web Service Messaging Performance Using a Context Store for Static Data](#) Invited paper for 5th WSEAS Int.Conf. on TELECOMMUNICATIONS and INFORMATICS ([TELE-INFO '06](#)), Istanbul, Turkey, May 27-29, 2006
 12. Geoffrey Fox [Grid-based Information Architecture for iSERVO International Solid Earth Research Virtual Organization](#) Abstract for Western Pacific Geophysics Meeting ([WPGM](#)) 24-27 July 2006 Beijing China
 13. Geoffrey C. Fox, Mehmet S. Aktas, Galip Aydin, Andrea Donnellan, Harshawardhan Gadgil, Robert Granat, Shrideep Pallickara, Jay Parker, Marlon E. Pierce, Sangyoon Oh, John Rundle, Ahmet Sayar, and Michael Scharber [Building Sensor Filter Grids: Information Architecture for the Data Deluge](#) IEEE Proceedings of 1st International [Conference](#) SKG2005 on Semantics, Knowledge and Grid Beijing China November 27-29 2005
 14. Mehmet S. Aktas, Geoffrey C. Fox, Marlon Pierce [Information Services for Dynamically Assembled Semantic Grids](#) IEEE Proceedings of 1st International [Conference](#) on SKG2005 Semantics, Knowledge and Grid Beijing China November 27-29 2005 page 10 [DOI](#)
 15. Geoffrey Fox [Collaboration and Community Grids](#) Special Session VI: [Collaboration and Community Grids](#) Proceedings of IEEE 2006 International Symposium on Collaborative Technologies and Systems CTS 2006 [conference](#) Las Vegas May 14-17 2006; IEEE Computer Society, Ed: Smari, Waleed & McQuay, William, pp 419-428. ISBN 0-9785699-0-3 [DOI](#)
 16. Ahmet Fatih Mustacoglu, Wenjun Wu, and Geoffrey Fox [Internet Calendaring and Scheduling Core Object Specification \(iCalendar\) Compatible Collaborative Calendar-Server \(CCS\) Web Services](#) Proceedings of IEEE 2006 International Symposium on Collaborative Technologies and Systems CTS 2006 [conference](#) Las Vegas May 14-17 2006; IEEE Computer Society, Ed: Smari, Waleed & McQuay, William, pp12-17. ISBN 0-9785699-0-3 [DOI](#)
 17. Wenjun Wu, Tao Huang, Geoffrey Fox [Building Scalable and High Efficient Java Multimedia Collaboration](#) Proceedings of IEEE 2006 International Symposium on Collaborative Technologies and Systems CTS 2006 [conference](#) Las Vegas May 14-17 2006; IEEE Computer Society, Ed: Smari, Waleed & McQuay, William, pp18-25. ISBN 0-9785699-0-3 [DOI](#)
 18. Minjun Wang, Geoffrey Fox and Marlon Pierce [Collaboration Entities on Deterministic Finite Automata](#) Proceedings of IEEE 2006 International Symposium on Collaborative

Technologies and Systems CTS 2006 [conference](#) Las Vegas May 14-17 2006; IEEE Computer Society, Ed: Smari, Waleed & McQuay, William, pp26-37. ISBN 0-9785699-0-3 [DOI](#)

19. Hyunju Kim, Loretta Moore, Robert Whalin, Geoffrey Fox, [An Experience on a Distance Education Course over the Access Grid Nodes](#) Proceedings of 4th International Conference on Education and Information Systems, Technologies and Applications ([EISTA 2006](#)) Orlando, USA, July 20-23, 2006.

2006 Technical Reports (or submitted and under review)

1. Geoffrey C. Fox, Ahmet Fatih Mustacoglu, Ahmet E. Topcu, Aurel Cami [SRG: A Digital Document-Enhanced Service Oriented Research Grid](#) Technical Report, November 28 2007
2. Xiao Dong, Kevin Gilbert, Rajarshi Guha, Jungkee Kim, Marlon Pierce, Geoffrey C. Fox and David J. Wild [Smart Mining of Drug Discovery Information: 1. A web service and workflow infrastructure](#) Submitted to Journal of Chemical Information and Modeling October 2006
3. Harshawardhan Gadgil, Geoffrey Fox, Shrideep Pallickara, Marlon Pierce [Scalable, Fault-tolerant Management in a Service Oriented Architecture](#) Technical Report October 10 2006
4. Andrea Donnellan, Jay Parker, Charles Norton, Gregory Lyzenga, Margaret Glasscoe, Geoffrey Fox, Marlon Pierce, John Rundle, Don McLeod, Lisa Grant, Walter Brooks, Terry Tullis QuakeSim: Enabling Model Interactions in Solid Earth Science Sensor Webs Technical Report October 2006
5. Geoffrey Fox and Dennis Gannon [A Survey of the Role and Use of Web Services and Service Oriented Architectures in Scientific/Technical Grids](#) Technical Report August 2006
6. Sangyoon Oh and Geoffrey Fox [Optimizing Web Service Messaging Performance in Mobile Computing](#) Technical Report, March 1 2006
7. Marvin Theimer, Savas Parastatidis, Tony Hey, Marty Humphrey, Geoffrey Fox [An Evolutionary Approach to Realizing the Grid Vision](#) Technical Report February 2006
8. Galip Aydin, Geoffrey C. Fox, Harshawardhan Gadgil and Marlon E. Pierce [Streaming Data Services to Support Archival and Real-Time Geographical Information System Grids](#) Technical Report February 10 2006
9. Harshawardhan Gadgil, Geoffrey Fox, Shrideep Pallickara, Marlon Pierce [Managing Grid Messaging Middleware](#) Technical Report February 8 2006
10. Geoffrey Fox [Some Comments on CiteULike Connotea and related Tools](#) Technical Report, January 1 2006

2006 Meetings and Presentations

1. Geoffrey Fox [OGF eScience Function](#) OGF GFSG Meeting Amsterdam, December 7 2006.
2. Geoffrey Fox [OGF eScience Function](#) Open Grid Forum OGF [Workshop](#) at Second IEEE International [Conference](#) on eScience and Grid Computing, Royal Tropical Institute Amsterdam, December 6 2006 • Yili Gong [Anycast in Delay Tolerant Networks](#) 49th annual IEEE Global Telecommunications Conference. GLOBECOM 2006 San Francisco California, November 29 2006
3. Geoffrey Fox [OGF eScience Function SC06](#) OGF function meeting, Tampa Florida, November 13 2006
4. Mehmet Nacar, Marlon Pierce, Gordon Erlebacher, Geoffrey Fox [Designing Grid Tag Libraries and Grid Beans](#). Second International [Workshop](#) on Grid Computing Environments GCE06 at SC06, Tampa, FL. Nov. 12-13 2006

5. Hao Yin, Sofia Brenes-Barahona, Donald F. McMullen, Marlon Pierce, Kianosh Huffman, Geoffrey Fox, [A PERMIS-based Authorization Solution between Portlets and Back-end Web Services](#). Second International [Workshop](#) on Grid Computing Environments GCE06 at SC06, Tampa, FL. Nov. 12-13 2006
6. Geoffrey Fox [Community Grids for Minority-Serving Institutions \(MSI\) SC06](#) Grid Interoperability Workshop ([TeraGrid Institute](#)) Tampa Florida, November 12 2006
7. Geoffrey Fox [Grids and the School of Informatics at Indiana University](#) Colloquium at Sun Yat-sen University Guangzhou China, November 4 2006
8. Geoffrey Fox, Mehmet Aktas, Sangyoon Oh and Marlon Pierce [XML Metadata Services](#) 2nd International Conference on Semantics, Knowledge and Grid (SKG2006), Guilin China, November 3 2006
9. Geoffrey Fox [Web 2.0, Knowledge and the Semantic Grid](#) 2nd International Conference on Semantics, Knowledge and Grid (SKG2006), Guilin China, November 2 2006
10. Geoffrey Fox [Conference Introduction](#) 2nd International Conference on Semantics, Knowledge and Grid (SKG2006), Guilin China, November 2 2006
11. Zao Liu, Marlon Pierce, Geoffrey Fox, Neil Devadasan [Concurrent Web Map Cache Server: A Vision for IndianaMap](#) Presentation at Indiana Geographic Information [Council](#) , Indianapolis Indiana, October 27 2006
12. Geoffrey Fox [Lessons from the Minority-Serving Institutions \(MSI\) Cyberinfrastructure \(CI\) Institute \[MSI-CI2\]](#) SACNAS (Society for Advancement of Chicanos and Native Americans in Science) National [Conference](#) Session organized by Chaitan Baru and Ann Gates, Tampa Florida, October 27 2006
13. Geoffrey Fox [Research and Funding Strategies](#) School of Informatics Art of Research Funding workshop October 25 2006
14. Geoffrey Fox [Minority-Serving Institutions \(MSI\) Cyberinfrastructure \(CI\) Institute \[MSI-CI2\] and CI Empowerment Coalition MSI-CIEC](#) Presentation a [Bring IT On!](#) Indiana University Bloomington, October 21 2006
15. Geoffrey Fox [Cyberinfrastructure to integrate simulation, data and sensors for collaborative eScience in CRESIS](#) at a [CERSER](#) and [CRESIS](#) Meeting Elizabeth City State University North Carolina, October 19 2006
16. Geoffrey Fox [Overview of Chemical Informatics and Cyberinfrastructure Collaboratory](#) CICC Advisory Group Meeting Bloomington Indiana, October 18, 2006
17. Geoffrey Fox [Grid of Grids Information Management Meeting](#) Dayton Ohio, October 12 2006
18. Geoffrey Fox [Cyberinfrastructure to integrate simulation, data and sensors for collaborative eScience](#) presented at [CRESIS](#) University of Kansas October 3 2006
19. Shrideep Pallickara, Marlon Pierce, Harshawardhan Gadgil, Geoffrey Fox, Yan Yan, Yi Huang, [A Framework for Secure End-to-End Delivery of Messages in Publish/Subscribe Systems](#) Presentation at the 7th IEEE/ACM International [Conference](#) on Grid Computing (GRID 2006). Barcelona, Spain; September 28th-29th 2006.
20. Geoffrey Fox [3 Questions for Cluster and Grid Use](#) at [Workshop](#) on Clusters and Computational Grids for Scientific Computing 2006 Highland Lake Inn, Asheville North Carolina September 11 2006
21. Geoffrey Fox [OGF eScience Function](#) Open Grid Forum Washington DC Convention Center September 10 2006

22. Geoffrey Fox , Marlon Pierce [CICC Poster](#) and its [Revision](#) for Inauguration of Big Red Supercomputer August 22 2006 Indiana University
23. Geoffrey Fox [Overview of Chemical Informatics and Cyberinfrastructure Collaboratory](#) at [CICC Meeting](#) with Michigan [MACE](#) Chemical Informatics Center, August 15-16 2006 IUPUI Indianapolis
24. Geoffrey Fox and Alex Ramirez [Lessons from the Minority-Serving Institutions \(MSI\) Cyberinfrastructure \(CI\) Institute \[MSI-CI2\]](#) NCSA [Workshop](#) Enabling Minority Serving Institutes to be Cyberinfrastructure Resource Providers Workshop August 7 2006
25. Geoffrey Fox [Grids and Parallel Computing in iSERVO International Solid Earth Research Virtual Organization](#) Chinese Earthquake Authority Beijing July 28 2006
26. Geoffrey Fox [Data and Metadata Architectures in a Robust Semantic Grid](#) Chinese Academy of Sciences Beijing July 28 2006
27. Geoffrey Fox [Web 2.0 and Grids for Scholarly Research](#) Peking University Beijing China 27 July 2006
28. Geoffrey Fox [Grid-based Information Architecture for iSERVO International Solid Earth Research Virtual Organization](#) Western Pacific Geophysics Meeting ([WPGM](#)) 24-27 July 2006 Beijing China
29. Geoffrey Fox [eScience and Grid Technology](#) and [longer version](#) Medical Science Building 326 IUPUI July 21 2006
30. Geoffrey Fox [Chemical Informatics and Cyberinfrastructure Collaboratory at Indiana University: Talk II](#) Joint meeting of the Molecular Libraries Screening Centers Network (MLSCN) and the Exploratory Centers for Cheminformatics Research (ECCR) July 18 Madison Hotel Washington DC
31. Geoffrey Fox [Chemical Informatics and Cyberinfrastructure Collaboratory at Indiana University: Talk I](#) Joint meeting of the Molecular Libraries Screening Centers Network (MLSCN) and the Exploratory Centers for Cheminformatics Research (ECCR) July 17 Madison Hotel Washington DC
32. Zao Liu, Marlon Pierce, and Geoffrey Fox [Concurrent Web Map Cache Server](#) June 7 2006 Coalition of Universities for Spatial Information Sciences (CUSIS) Meeting at POLIS Center IUPUI Indianapolis
33. Geoffrey Fox [Grids/CI for Scholarly Research and application to Chemical Informatics](#) at [HPC2006](#) July 4 2006 Cetraro Italy (with [Longer](#) version)
34. Geoffrey Fox, Alex Ho [Grid of Grids Information Management Kick off Meeting](#) Telephone Project discussion June 30 2006
35. Geoffrey Fox [Grid System Issues](#) June 29 2006 The Minority-Serving Institutions Cyberinfrastructure Institute MSICI² [Workshop](#) June 26-30, 2006 SDSC
36. Geoffrey Fox [Minority-Serving Institutions \(MSI\) Cyberinfrastructure \(CI\) Institute \[MSI-CI²\]](#) June 27 2007 The Minority-Serving Institutions Cyberinfrastructure Institute MSICI² [Workshop](#) June 26-30, 2006 SDSC
37. Harshawardhan Gadgil, Geoffrey Fox, Shrideep Pallickara, Marlon Pierce [Managing Grid Messaging Middleware](#), Presentation at Challenges of Large Applications in Distributed Environments ([CLADE](#)) Paris France June 19 2006
38. Geoffrey Fox [TeraGrid and The Minority-Serving Institutions \(MSI\) Cyberinfrastructure \(CI\) Empowerment Coalition MSI-CIEC building on MSI-CI Institute \[MSI-CI2\]](#) Presentation at [TeraGrid '06](#) Indianapolis IN June 12-15 2006

39. Geoffrey Fox [Service Oriented Collaboration and Community Grids](#) 2006 International Symposium on Collaborative Technologies and Systems [CTS2006](#) May 14-17 2006 Las Vegas NV
40. Minjun Wang, Geoffrey Fox and Marlon Pierce [Collaboration Entities on Deterministic Finite Automata](#) 2006 International Symposium on Collaborative Technologies and Systems [CTS2006](#) May 14-17 2006 Las Vegas NV
41. Wenjun Wu, Tao Huang, Geoffrey Fox [Building Scalable and High Efficient Java Multimedia Collaboration](#) 2006 International Symposium on Collaborative Technologies and Systems [CTS2006](#) May 14-17 2006 Las Vegas NV
42. Geoffrey Fox [Earthquake Forecasting Interoperability GGF17](#) Grid Interoperability Session Tokyo Japan May 11 2006
43. Geoffrey Fox [What is OGSA?](#) at [GGF17](#) OGSA and Alternative Grid Architectures Panel Tokyo Japan May 10 2006
44. Geoffrey Fox [Revised Applications and Requirements for Scientific Workflow NSF Workshop](#) on Challenges of Scientific Workflows May 2 2006
45. Geoffrey Fox [Applications and Requirements for Scientific Workflow NSF Workshop](#) on Challenges of Scientific Workflows May 1 2006
46. Geoffrey Fox [Applications and Requirements for Scientific Workflow Introduction NSF Workshop](#) on Challenges of Scientific Workflows May 1 2006
47. Geoffrey Fox [Message Management](#) CRMC Meeting Portland Airport Oregon April 27 2006
48. Marlon Pierce Geoffrey Fox [Community Grids Lab CICC Activities NIH Meeting](#) April 26 2006
49. Geoffrey Fox [e-moreorlessanything implemented with Grids P2P and Web Services](#) at [I533 Seminar](#) in Chemical Informatics: Molecular Informatics, the Data Grid, and an Introduction to eScience April 18 2006
50. Geoffrey Fox [The Minority-Serving Institutions Cyberinfrastructure Institute](#) NCSA MSI Summit April 11-12 2006
51. Geoffrey Fox and Marlon Pierce [ACES Scholars' Grid](#) 5th ACES International [Workshop](#) Maui Prince Hotel, Island of Maui, Hawaii April 6 2006
52. Geoffrey Fox [e-moreorlessanything: The Killer Application; Grids P2P and Web Services: The Killer Technologies](#) Upsilon Pi Epsilon (Computer Science Honor Society) University of Southern California March 29 2006
53. Geoffrey Fox [A Grid-of-Grids Service Architecture for Net-Centric Operations: Further Discussion](#) GSAW Manhattan Beach March 29 2006 Ground System Architectures [Workshop](#)
54. Geoffrey Fox [A Grid-of-Grids Service Architecture for Net-Centric Operations](#) GSAW Manhattan Beach March 28 2006 Ground System Architectures [Workshop](#)
55. Minjun Wang, Geoffrey Fox and Marlon Pierce (given by Ahmet Sayar) [Thin Client Collaboration Web Services](#) IEEE International Conference on Internet and Web Applications and Services [ICIW'06](#) February 23-25, 2006 Guadeloupe, French Caribbean
56. Geoffrey Fox [Community Grids Laboratory](#) February 22 2006 Bloomington Indiana
57. Geoffrey Fox [Web Service Information Systems and Applications](#), with [Longer Version](#); Semantic Grid Workshop, February 15 2006, [GGF16 Meeting](#) Athens, Greece
58. Geoffrey Fox [Collaboration Grids](#) Education Grid Community Birds of a Feather, February 15 2006, [GGF16 Meeting](#) Athens, Greece

59. Geoffrey Fox [The Minority-Serving Institutions \(MSI\) Cyberinfrastructure \(CI\) Institute MSICII](#), Grid Education and Training Workshop, February 14 2006, GGF16 [Meeting](#) Athens, Greece
60. Geoffrey Fox [Two Examples of Grids](#), Defining the Grid Workshop organized by Frederica Darema, February 14 2006, GGF16 [Meeting](#) Athens, Greece
61. Geoffrey Fox, Shrideep Pallickara, Damodar Yemme, Hasan Bulut and Sima Patel [Reliable Messaging for Grids and Web Services](#) and [Longer Version](#), Workshop on Reliability & Robustness in Grid Computing Systems, February 13 2006, GGF16 [Meeting](#) Athens, Greece
62. Geoffrey Fox [Initial Thoughts](#) at The Minority-Serving Institutions (MSI) Cyberinfrastructure (CI) Institute MSICII Planning and Learning [Meeting](#) SDSC San Diego January 31 2006
63. Geoffrey Fox [Introduction](#) to The Minority-Serving Institutions (MSI) Cyberinfrastructure (CI) Institute MSICII Planning and Learning [Meeting](#) SDSC San Diego January 30-31 2006
64. Geoffrey Fox [Semantic Scholars' Grid](#) at January 27 2006 Chemical Informatics and Cyberinfrastructure Collaboratory [Meeting](#) Bloomington IN

----- Presentations and Publications 2005 -----

2005 Journal Articles (published)

1. Geoffrey Fox, Shrideep Pallickara, Marlon Pierce, Harshawardhan Gadgil, [Building Messaging Substrates for Web and Grid Applications](#) Special Issue on *Scientific Applications of Grid Computing* Philosophical Transactions of the Royal Society: Mathematical, Physical and Engineering Sciences. Volume 363, Number 1833, pp 1757-1773. August 15, 2005
2. Lisa B. Grant, Andrea Donnellan, Dennis McLeod, Marlon Pierce, Geoffrey C. Fox, Anne Yun-An Chen, Miryha M. Gould, Sang-Soo Sung, Paul Rundle, "[A Web-Service Based Universal Approach to Heterogeneous Fault Databases](#)", Computing in Science and Engineering., Vol. 7, No. 4. (July 2005), pp. 51-57. [IEEE Link](#)
3. Tony Hey and Geoffrey Fox [Grids and Web Services for e-Science](#) Concurrency and Computation: Practice and Experience 17, 317-322, April 2005 [DOI](#)
4. Wenjun Wu, Hasan Bulut, Ahmet Uyar, Geoffrey Fox [Adapting H.323 Terminals in a Service-Oriented Collaboration System](#) Special "Internet Media" issue of IEEE Internet Computing July-August 2005, Vol 9 number 4 pages 43-50 [DOI](#)
5. Malcolm Atkinson, David DeRoure, Alistair Dunlop, Geoffrey Fox, Peter Henderson, Tony Hey, Norman Paton, Steven Newhouse, Savas Parastatidis, Anne Trefethen and Paul Watson. [Web Service Grids: An Evolutionary Approach](#) UK e-Science Technical Report July 13 2004 published in a special issue of Concurrency&Computation: Practice&Experience 17, 377-389, 2005. [DOI](#)
6. Geoffrey Fox and Shrideep Pallickara [Deploying the NaradaBrokering Substrate in Aiding Efficient Web & Grid Service Interactions](#) Invited paper for the Special Issue of the Proceedings of the IEEE on Grid Computing. Vol 93, No 3. pp 564-577. March 2005. [DOI](#)
7. Shrideep Pallickara, Geoffrey Fox, Xi Rao, Ahmet Uyar and David Walker [Performance of a possible Grid Messaging Infrastructure](#) UK e-Science meeting on Grid Performance Edinburgh December 9 2002, Special Issue of Concurrency and Computation: Practice and Experience on Grid Performance. Concurrency and Computation: Practice and Experience, Vol. 17, No. 2-4. (February 2005), pp. 193-214. [DOI](#) [ACM Guide](#)

8. Ozgur Balsoy, Ying Jin, Galip Aydin, Marlon Pierce and Geoffrey Fox [Automating Metadata Web Service Deployment for Problem Solving Environments](#) Special Issue of Future Generation Computer Systems Vol. 21, No. 6. (June 2005), pp. 910-919. [DOI](#)
9. Geoffrey Fox, Sang Lim, Shrideep Pallickara, Marlon Pierce [Message-Based Cellular Peer-to-Peer Grids: Foundations for Secure Federation and Autonomic Services](#) in PEER-TO-PEER COMPUTING AND INTERACTION WITH GRIDS -- Special issue of Future Generation Computer Systems Vol. 21, No. 3. (March 2005), pp. 401-415. [DOI](#)
10. Choonhan Youn, Marlon E. Pierce, and Geoffrey C. Fox [Building Problem Solving Environments with Application Web Service Toolkits](#) Special Issue of Future Generation Computer Systems Vol. 21, No. 6. (June 2005), pp. 856-867 [DOI](#)
11. Sang Boem Lim, Bryan Carpenter, Geoffrey Fox, Han-ku Lee [Collective communication for the HPJava programming language](#) Concurrency and Computation: Practice and Experience, Vol. 17, No. 7-8. (June 2005), pp. 867-894. 2002 ACM Java Grande–ISCOPE Conference Part II
12. Geoffrey Fox, Shrideep Pallickara, Xi Rao [Towards enabling peer-to-peer Grids](#) or [Original](#) Concurrency and Computation: Practice & Experience archive Volume 17 , Issue 7-8 (June 2005) Pages: 1109 - 1131. 2002 ACM Java Grande–ISCOPE Conference Part II
13. Geoffrey Fox [Editorial for Special Issue: ACM 2002 Java Grande–ISCOPE Conference](#) Concurrency and Computation: Practice and Experience, Vol. 17, No. 5-6. (2005), pp. 419-422.

2005 Journal Articles (accepted but not in print)

6. Geoffrey C. Fox, Mehmet S. Aktas, Galip Aydin, Harshawardhan Gadgil, Shrideep Pallickara, Marlon E. Pierce, and Ahmet Sayar [Algorithms and the Grid](#) August 2005 talk at [ALGORITMY 2005](#) Conference on Scientific Computing Vysoke Tatry, Podbanske March 13-18, 2005. Paper to be published in a regular issue of the Springer mathematical journal Computing and Visualization in Science (CVS).
7. Mehmet Aktas, Galip Aydin, Andrea Donnellan, Geoffrey Fox, Robert Granat , Lisa Grant, Greg Lyzenga, Dennis McLeod, Shrideep Pallickara, Jay Parker, Marlon Pierce, John Rundle, Ahmet Sayar, and Terry Tullis [iSERVO: Implementing the International Solid Earth Research Virtual Observatory by Integrating Computational Grid and Geographical Information Web Services](#) Technical Report December 2004, To be published in Special Issue of Pure and Applied Geophysics (PAGEOPH) for Beijing ACES [Meeting](#) July 2004
8. Andrea Donnellan, John Rundle, Geoffrey Fox, Dennis McLeod, Lisa Grant, Terry Tullis, Marlon Pierce, Jay Parker, Greg Lyzenga, Robert Granat , Margaret Glasscoe [QuakeSim and the Solid Earth Research Virtual Observatory](#) with [Previous version](#) To be published in Special Issue of Pure and Applied Geophysics (PAGEOPH) for Beijing ACES [Meeting](#) July 2004
9. Dennis Gannon and Geoffrey Fox [Workflow in Grid Systems](#) Editorial of special issue of Concurrency&Computation: Practice&Experience based on GGF10 Berlin [meeting](#)
10. Wenjun Wu, Geoffrey Fox, Hasan Bulut, Ahmet Uyar, Tao Huang [Service Oriented Architecture for VoIP conferencing](#) to be published 2006 in Special Issue on Voice over IP - Theory and Practice of the International Journal of Communication Systems

2005 Book Chapters

2. Geoffrey Fox, Shrideep Pallickara, Galip Aydin and Marlon Pierce [Messaging in Web Service Grid with Applications to Geographical Information Systems](#) Chapter in book based on ON HIGH PERFORMANCE COMPUTING TECHNOLOGY AND APPLICATIONS Cetraro Italy May 31-June 3 2004. "[Grid Computing: A New Frontier of High Performance Computing](#)" (ed. L. Grandinetti, Elsevier, Amsterdam, 2005) pages 305-331
3. Geoffrey Fox and Marlon Pierce [SERVO Earthquake Science Grid](#) as a summary of iSERVO technology October 2004 in January 2005 report [High Performance Computing Requirements for the Computational Solid Earth Sciences](#) edited by Ron Cohen and started at May 2004 workshop on Computational Geoinformatics
4. Wenjun Wu, Ahmet Uyar, Hasan Bulut, Sangyoon Oh, Geoffrey Fox [Grid Service Architecture for Videoconferencing](#) to appear as chapter in book "Grid Computational Methods" Edited by M.P. Bekakos, G.A. Gravvanis and H.R. Arabnia
5. Geoffrey Fox, Shrideep Pallickara, and Marlon Pierce [Building a Grid of Grids: Messaging Substrates and Information Management](#) to appear as chapter in book "Grid Technologies: Emerging from Distributed Architectures to Virtual Organizations" Editors: M.P. Bekakos, G.A. Gravvanis and H.R. Arabnia.

2005 Conference Papers

1. Shrideep Pallickara, Geoffrey Fox, Beytullah Yildiz, Sangmi Lee Pallickara, Sima Patel and Damodar Yemme [An Analysis of the Costs for Reliable Messaging in Web/Grid Service Environments](#) Proceedings of the 2005 IEEE International [Conference](#) on e-Science & Grid Computing. December 5-8 2005, Melbourne, Australia
2. Shrideep Pallickara, Harshawardhan Gadgil and Geoffrey Fox [On the Discovery of Topics in Distributed Publish/Subscribe systems](#) Proceedings of the IEEE/ACM [GRID 2005 Workshop](#), pp 25-32. November 13-14 2005 Seattle, WA. Also selected as one of the six best papers at the workshop Pages 25-32 [DOI](#)
3. Geoffrey C. Fox, Mehmet S. Aktas, Galip Aydin, Hasan Bulut, Harshawardhan Gadgil, Sangyoon Oh, Shrideep Pallickara, Marlon E. Pierce, Ahmet Sayar, and Gang Zhai [Grids for Real Time Data Applications](#) Invited talk in proceedings of PPAM 2005 – 6th International [Conference](#) on Parallel Processing and Applied Mathematics Poznan Poland September 11-14 2005
4. Minjun Wang, Geoffrey Fox and Marlon Pierce [Thin Client Collaboration Web Services](#) Proceedings of IEEE International Conference on Internet and Web Applications and Services [ICIW'06](#) February 23-25, 2006 Guadeloupe, French Caribbean
5. Ahmet Sayar, Marlon Pierce and Geoffrey Fox [Integrating AJAX Approach into GIS Visualization Web Services](#) Proceedings of IEEE International Conference on Internet and Web Applications and Services [ICIW'06](#) February 23-25, 2006 Guadeloupe, French Caribbean
6. A. Sayar, M. Pierce, G. C. Fox [DEVELOPING GIS VISUALIZATION WEB SERVICES FOR GEOPHYSICAL APPLICATIONS](#) ISPRS International Society for Photogrammetry and Remote Sensing [Workshop](#) Commission II WG/2 METU, Ankara, Turkey, November, 24-25, 2005
7. Mehmet S. Aktas, Geoffrey C. Fox, Marlon Pierce [Information Services for Dynamically Assembled Semantic Grids](#) Proceedings of 1st International [Conference](#) on SKG2005 Semantics, Knowledge and Grid Beijing China November 27-29 2005

8. Beytullah Yildiz, Shrideep Pallickara, Geoffrey Fox [Experiences in Deploying Services within the Axis Container](#) Proceedings of IEEE International Conference on Internet and Web Applications and Services [ICIW'06](#) February 23-25, 2006 Guadeloupe, French Caribbean, with [Older version](#) Technical Report October 2005
9. Gang Zhai, Geoffrey Fox, Marlon Pierce, Wenjun Wu, Hasan Bulut [eSports: Collaborative and Synchronous Video Annotation System in Grid Computing Environment](#) Proceedings of IEEE International [Symposium](#) on Multimedia (ISM2005), Pages 95-103, IEEE Computer Society, December 12-14, 2005 Irvine, California, USA, [DOI](#)
10. Geoffrey C. Fox, Mehmet S. Aktas, Galip Aydin, Hasan Bulut, Shrideep Pallickara, Marlon Pierce, Ahmet Sayar, Wenjun Wu, and Gang Zhai [Real Time Streaming Data Grid Applications](#) Invited talk at [TIWDC 2005](#) CNIT Tyrrhenian International Workshop on Digital Communications July 4-6 2005
11. Geoffrey Fox, Galip Aydin, Harshawardhan Gadgil, Shrideep Pallickara, Marlon Pierce, and Wenjun Wu [Management of Real-Time Streaming Data Grid Services](#) Invited talk at Fourth International Conference on Grid and Cooperative Computing ([GCC2005](#)), held in Beijing, China, during Nov 30-Dec 3, 2005 and [Longer Version](#)
12. Jungkee Kim, Geoffrey Fox, and Seong-Joon Yoo. [Data Integration Hub for a Hybrid Paper Search](#). In *Proceedings of 9th International Conference on Knowledge-based & Intelligent Information & Engineering Systems (KES)*, pages 170-176 volume 3683 [DOI](#) of *Lecture Notes in Artificial Intelligence*. Melbourne Australia 14-16 September, 2005.
13. Sang Boem Lim, Bryan Carpenter, Geoffrey Fox, and Han-Ku Lee, [Collective Communications for Scalable Programming](#) Proceedings of Third International [Symposium](#) on Parallel and Distributed Processing and Applications ([ISPA'05](#)), Nanjing, China November 2-5 2005. Springer-Verlag Lecture Notes in Computer Science, Volume 3758, Oct 2005, Pages 286 - 297 [DOI](#)
14. Sang Lim, Geoffrey Fox, Ali Kaplan, Shrideep Pallickara and Marlon Pierce [GridFTP and Parallel TCP Support in NaradaBrokering](#) Proceedings of 6th International Conference on Algorithms and Architectures for Parallel Processing [ICA3PP 2005](#) Melbourne Australia. October 2-5 2005. Springer-Verlag Lecture Notes in Computer Science, Volume 3719, Page 93-102 [DOI](#)
15. Sang Boem Lim, Bryan Carpenter, Geoffrey Fox, and Han-Ku Lee, [A Low--Level Communication Library for Java HPC](#) Proceedings of 6th International Conference on Algorithms and Architectures for Parallel Processing. [ICA3PP 2005](#) Melbourne Australia. October 2-5 2005. Springer-Verlag Lecture Notes in Computer Science, Volume 3719, Pages 429 - 434 [DOI](#)
16. Jungkee Kim and Geoffrey Fox. [Scalable Hybrid Search on Distributed Databases](#). In *Proceedings of 3rd International Workshop on Autonomic Distributed Data and Storage Systems Management (ADSM'05)* in conjunction with [ICCS 2005](#), May 22-25 2005, Atlanta GA. Lecture Notes in Computer Science, Springer-Verlag Volume 3516, Pages 431 - 438. [DOI](#)
17. Geoffrey Fox, Alex Ho, Shrideep Pallickara, Marlon Pierce, Wenjun Wu [Grids for the GiG and Real Time Simulations](#) Proceedings of Ninth IEEE International [Symposium DS-RT 2005](#) on Distributed Simulation and Real Time Applications, pages 129-138 IEEE Computer Society [DOI](#), Montreal October 10-12 2005
18. Taylor, S.J.E.; Fox, G.; Fujimoto, R.; Pullen, J.M.; Roberts, D.J.; Theodoropoulos, G.K. [Revisiting Distributed Simulation and the Grid: A Panel](#) Distributed Simulation and Real-

- Time Applications, 2005. [DS-RT 2005](#) Proceedings. Ninth IEEE International Symposium Page161. [DOI](#), Montreal October 10-12 2005
19. Shrideep Pallickara, Harshawardhan Gadgil and Geoffrey Fox [On the Discovery of Brokers in Distributed Messaging Infrastructures](#) Proceedings of [IEEE Cluster 2005](#), September 27 - 30, 2005, Boston, Massachusetts, USA
 20. Ahmet Sayar, Marlon Pierce and Geoffrey Fox, [Message Exchange for Web Service-Based Mapping Services](#), Proceedings of [GeoInformatics'05](#), Toronto Canada 17-19 August 2005.
 21. Ahmet Uyar, Wenjun Wu, Hasan Bulut, Geoffrey Fox. [Service-Oriented Architecture for a Scalable Videoconferencing System](#) Proceedings of IEEE International [Conference](#) on Pervasive Services 2005 (ICPS'05) July 2005, Santorini, Greece.
 22. Sang Boem Lim, Bryan Carpenter, Geoffrey Fox, and Han-Ku Lee, [Implementation of Collectives for Scalable Programming in Java](#), Proceedings of 2005 International Conference on Parallel and Distributed Processing Techniques and Applications ([PDPTA'05](#): June 27-30, 2005, Las Vegas, USA)
 23. Mehmet Aktas, Galip Aydin, Andrea Donnellan, Geoffrey Fox, Robert Granat, Greg Lyzenga, Dennis McLeod, Shrideep Pallickara, Jay Parker, Marlon Pierce, John Rundle, and Ahmet Sayar [Implementing Geographical Information System Grid Services to Support Computational Geophysics in a Service-Oriented Environment](#) NASA Earth-Sun System Technology [Conference](#) University of Maryland, Adelphi, Maryland, June 28 - 30, 2005. All material is online for [paper](#), [presentation](#), and [abstract](#)
 24. M. P. Thomas, J. Burruss, L. Cinquini, G. Fox, D. Gannon, L. Gilbert, G. von Laszewski, K. Jackson, D. Middleton, R. Moore, M. Pierce, B. Plale, A. Rajasekar, R. Regno, E. Roberts, D. Schissel, A. Seth, and W. Schroeder [Grid Portal Architectures for Scientific Applications](#) Proceedings of SciDAC 2005 [meeting](#) June 26-30 2005 San Francisco
 25. Galip Aydin, Mehmet S. Aktas, Geoffrey C. Fox, Harshawardhan Gadgil, Marlon Pierce, Ahmet Sayar [SERVOGrid Complexity Computational Environments \(CCE\) Integrated Performance Analysis](#) Proceedings of Grid Computing [Conference](#), 2005. The 6th IEEE/ACM International Workshop 13-14 Nov. 2005. Page(s): 256 - 261 [DOI](#)
 26. Pete Burnap, Hasan Bulut, Shrideep Pallickara, Geoffrey Fox, David Walker, Ali Kaplan, Beytullah Yildiz, and Mehmet A. Nacar [Worldwide Messaging Support for High Performance Real-time Collaboration](#) UK e-Science [All Hands Meeting](#) September 2005
 27. Geoffrey Fox [Global Multimedia Collaboration System Tutorial](#) Proceedings of the IEEE International [Symposium](#) on Collaborative Technologies and Systems CTS05 May 2005, St. Louis Missouri, USA. PAGES 11-13 [DOI](#)
 28. Ahmet Uyar and Geoffrey Fox. [Investigating the Performance of Audio/Video Service Architecture I: Single Broker](#) Proceedings of the IEEE International [Symposium](#) on Collaborative Technologies and Systems CTS05 May 2005, St. Louis Missouri, USA. PAGES 120-127 [DOI](#)
 29. Ahmet Uyar and Geoffrey Fox. [Investigating the Performance of Audio/Video Service Architecture II: Broker Network](#). Proceedings of the IEEE International [Symposium](#) on Collaborative Technologies and Systems CTS05 May 2005, St. Louis Missouri, USA. Pages 128-135 [DOI](#)
 30. Sangyoon Oh, Hasan Bulut, Ahmet Uyar, Wenjun Wu, Geoffrey Fox [Optimized Communication using the SOAP Infoset For Mobile Multimedia Collaboration Applications](#) Proceedings of the IEEE International Symposium on Collaborative Technologies and Systems CTS05 May 2005, St. Louis Missouri, USA. Pages 32 - 39 [DOI](#)

31. Minjun Wang, Geoffrey Fox and Marlon Pierce [Instantiations of Shared Event Model in Grid-based Collaboration](#) Proceedings of the 9th World Multi-Conference on Systemics, Cybernetics and Informatics July 10-13, 2005 - Orlando, Florida, USA
32. Sangyoon Oh, Sangmi Lee Pallickara, Sunghoon Ko, Jai-Hoon Kim, Geoffrey Fox [Cost Model and Adaptive Scheme for Publish/Subscribe Systems on Mobile Environments](#) Springer-Verlag Lecture Notes in Computer Science 3516, pp. 275-278 in Proceedings of the 2nd International Workshop on Active and Programmable Grids Architectures and Components, [APGAC05](#) as part of [ICCS05](#), Atlanta, GA, May 2005. [DOI](#)
33. Sangyoon Oh, Sangmi Lee Pallickara, Sunghoon Ko, Jai-Hoon Kim, Geoffrey Fox [Publish/Subscribe Systems on Node and Link Error Prone Mobile Environments](#) Lecture Notes in Computer Science 3515, pp. 576-584 in Proceeding of the Wireless and Mobile Systems [Workshop](#) at [ICCS 2005](#), Atlanta, GA, May 2005. [DOI](#)
34. Mehmet S. Aktas, Geoffrey Fox, Marlon Pierce [Managing Dynamic Metadata as Context](#) Istanbul International Computational Science and Engineering Conference ([ICCSE2005](#)) June 2005
35. Harshawardhan Gadgil, Geoffrey Fox, Shrideep Pallickara, Marlon Pierce, Robert Granat [A Scripting based Architecture for Management of Streams and Services in Real-time Grid Applications](#) Proceedings of the IEEE/ACM Cluster Computing and Grid 2005 Conference ([CCGrid 2005](#)). Cardiff, UK May 2005 Pages 710-717. No DOI
36. Harshawardhan Gadgil, Geoffrey Fox, Shrideep Pallickara [HPSearch for Managing Distributed Services](#) Work in Progress session at IEEE/ACM Cluster Computing and Grid 2005 Conference ([CCGrid 2005](#)). Cardiff, UK May 2005
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1. Geoffrey Fox [Comments on Software Systems](#) HATC Corporation Beijing, December 6 2005
2. Geoffrey Fox [Semantic and Streaming Grids](#) ICT Chinese Academy of Sciences Beijing, December 6 2005

3. Geoffrey Fox [Remarks on Grids in CGL and Worldwide](#) National CIMS Engineering Research Center at Tsinghua University, Beijing China, December 5 2005
4. Geoffrey Fox [Grids for Real-time and Streaming Applications](#) December 2 2005 Invited Presentation at [GCC2005](#) - the 4th International Conference on Grid and Cooperative Computing November 30-December 3, 2005, Beijing, China with [Longer version](#)
5. Geoffrey Fox [GCC2005 and the Harmony and Prosperity of Civilizations](#) December 2 2005 Introductory remarks at [GCC2005](#) - the 4th International Conference on Grid and Cooperative Computing November 30-December 3, 2005, Beijing, China
6. Mehmet S. Aktas, Geoffrey C. Fox, Marlon Pierce [Information Services for Dynamically Assembled Semantic Grids](#) Research Presentation at SKG2005 [International Conference on Semantics, Knowledge and Grid](#) Beijing Friendship Hotel November 28 2005
7. Geoffrey Fox [Services and the Semantic Grid](#) Panel discussion at SKG 2005 [International Conference on Semantics, Knowledge and Grid](#) Beijing Friendship Hotel November 28 2005
8. Geoffrey Fox and Alex Ho [Use of Grids in DoD Applications](#) and [Longer version](#) Demonstration at AFRL Rome Laboratory November 16 2005
9. Shrideep Pallickara, Geoffrey Fox and Harshawardhan Gadgil [On the Creation & Discovery of Topics in Distributed Publish/Subscribe Systems](#). Talk at the plenary session of IEEE/ACM [GRID 2005 workshop](#) November 14 2005 (part of SC05 November 12-18 2005)
10. Geoffrey Fox [CICC Plan](#) in [Chemical Informatics and Cyberinfrastructure Collaboratory Meeting](#) October 28 2005
11. Geoffrey Fox at Frontiers of Extreme (Zettaflops) Computing [Workshop](#), October 23-27, 2005, Santa Cruz, CA, US
12. Geoffrey Fox [Grids for Chemical Informatics](#) in [Chemical Informatics and Cyberinfrastructure Collaboratory Meeting](#) October 21 2005
13. Geoffrey Fox [The Minority-Serving Institutions \(MSI\) Cyberinfrastructure \(CI\) Institute \[MSI C\(I\)2\]](#) Poster at EPIC All Hands Meeting October 18-19 2005 with Marlon Pierce at Richard Tapia Conference, October 19-22 2005, Albuquerque, NM
14. Geoffrey Fox [Panel: Revisiting Distributed Simulation and the Grid](#) Talk October 11 2005 at Ninth IEEE International [Symposium DS-RT 2005](#) Distributed Simulation and Real Time Applications' Montreal October 10-12 2005
15. Geoffrey Fox [Grids for DoD and Real Time Simulations](#) Keynote Talk October 11 2005 at Ninth IEEE International [Symposium DS-RT 2005](#) Distributed Simulation and Real Time Applications' Montreal October 10-12 2005
16. Geoffrey Fox [Grids for DS-RT 2005 Symposium](#) Tutorial October 9 2005 at Ninth IEEE International [Symposium DS-RT 2005](#) Distributed Simulation and Real Time Applications' Montreal October 10-12 2005
17. Geoffrey Fox organizing community program and [Framework for High Performance Grid and Web Services](#) at Global Grid Forum GGF15 Workshop on High Performance Web Services October 2 2005 Boston Ma
18. Shrideep Pallickara, Harshawardhan Gadgil, Geoffrey Fox [On the Discovery of Brokers in Distributed Messaging Infrastructures](#) IEEE Cluster 2005, September 27 - 30, 2005, Boston, Massachusetts, USA
19. Geoffrey Fox [Grids for Real-time and Streaming Applications](#) I-light Workshop September 22 2005 Indianapolis

20. Geoffrey Fox [Grids for Real-time and Streaming Applications](#) PPAM 2005 – 6th International [Conference](#) on Parallel Processing and Applied Mathematics Poznan Poland September 11-14 2005
21. Geoffrey Fox, Alex Ho and Marlon Pierce [Use of Grids in DoD Applications](#) Project presentation August 25 2005 Bloomington Indiana. See [Analysis of Grids for Global Information Grid \(GiG\) and Network Centric Operations and Warfare \(NCOW\)](#)
22. Geoffrey Fox and Shrideep Pallickara [FINS and FIRMS: Notification and Reliable Messaging for the OMII](#) OMII meeting July 22 2005 Southampton UK
23. Geoffrey Fox [Grid School](#) Vico Equense Italy July 21 2005
24. Geoffrey Fox [Grids for Real-time and Streaming Applications TIWDC 2005](#) CNIT Tyrrhenian International Workshop on Digital Communications July 4-6 2005
25. M. P. Thomas, J. Burruss, L. Cinquini, G. Fox, D. Gannon, L. Gilbert, G. von Laszewski, K. Jackson, D. Middleton, R. Moore, M. Pierce, B. Plale, A. Rajasekar, R. Regno, E. Roberts, D. Schissel, A. Seth, and W. Schroeder Poster on [Grid Portal Architectures for Scientific Applications](#) for SciDAC 2005 [meeting](#) June 26-30 2005 San Francisco
26. Geoffrey Fox organizing community program at Global Grid Forum [GGF14](#) June 26-30, 2005 Chicago, IL, USA
27. Geoffrey Fox [Tutorial on GlobalMMCS](#) May 17 2005 at The 2005 International Symposium on Collaborative Technologies and Systems [CTS05](#) Adam's Mark Hotels & Resorts Saint Louis, Missouri, USA
28. Geoffrey Fox and Marlon Pierce [Community Grids Lab SERVOGrid CCE Review](#) Internal Presentation May 11 2005
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31. Geoffrey Fox [Grids: Concepts, Technologies and Applications](#) Presentation for [CENDI](#) at NTIS April 25 2005
32. Geoffrey Fox [Algorithms and the Grid ALGORITMY 2005](#) Conference on Scientific Computing Vysoke Tatry, Podbanske March 13-18, 2005
33. Geoffrey Fox at Global Grid Forum [GGF13](#) March 14-17, 2005 Seoul, Korea
34. Geoffrey Fox [Grids Web Services - The Global Operating system of the World - Its Killer Applications](#) Indiana University CS Honors Students Presentations, February 28 2005
35. Marlon Pierce and Geoffrey Fox [Summary of SERVOGrid](#) UC Davis iSERVO meeting February 25 2005
36. Geoffrey Fox [Amplitude Analysis](#) in [QCD and the role of Gluonic Excitations](#) Meeting SURA Washington DC February 11 2005
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