

Xiannong Meng

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CURRENT POSITION

Professor, Department of Computer Science, Bucknell University, Lewisburg, PA 17837

EDUCATION

Ph.D. in Computer Science, Worcester Polytechnic Institute, Worcester, MA, U.S.A. ; Dissertation title: “Delay Analysis of a Ring-Based Metropolitan Area Network with Multiple Classes of Traffic”; Major advisor: Dr. Robert Kinicki; May, 1990.

M.S. in Computer Science, Worcester Polytechnic Institute, Worcester, MA, U.S.A.; Thesis title: “The Graphical Representation of the Sorting Algorithms”, May, 1986.

B.S. in Mathematics, Nanjing Institute of Technology (now Southeast University); P.R. China, 1982.

EMPLOYMENT HISTORY

September 2005 - present : Professor, Department of Computer Science, Bucknell University, Lewisburg, PA, U.S.A.

September 2006 - May 2010 : Chair, Department of Computer Science, Bucknell University, Lewisburg, PA, U.S.A.

September 2001 - August 2005 : Associate Professor, Department of Computer Science, Bucknell University, Lewisburg, PA, U.S.A. Tenured in fall of 2003

September 1999 - August 2001 : Tenured Associate Professor, Department of Computer Science, University of Texas - Pan American, Edinburg, TX, U.S.A.

September 1994 - August 1999: Assistant Professor, Department of Computer Science, University of Texas - Pan American, Edinburg, TX, U.S.A.

September 1991 - August 1994: Visiting Assistant Professor, Department of Computer Science, Bucknell University, Lewisburg, PA, U.S.A.

September 1990 - August 1991: Visiting Assistant Professor, Department of Computer Science, Worcester Polytechnic Institute, Worcester, MA, U.S.A.

May 1988 - August 1990: Part-time Instructor, Department of Computer Science, Worcester Polytechnic Institute, Worcester, MA, U.S.A.

September 1986 - August 1991: Assistant Laboratory Manager of UNIX and VMS based systems of various platforms (Encore Multimax, Sun stations, SPARC stations, DECStations, VAXes), Department of Computer Science, Worcester Polytechnic Institute

October 1984 - May 1986: Laboratory Assistant, Academic Computing Center, Worcester Polytechnic Institute, Worcester, MA 01609

February 1982 - August 1984: Lecturer and staff, Computer Center, Nanjing Institute of Technology (now Southeast University), Nanjing, China

TEACHING EXPERIENCE

September 2001 - present: taught undergraduate courses at Bucknell University “Introduction to Computer Science I,” “Introduction to Computer Science II,” “Computer Networks,” “Computer Organizations and Programming,” “Operating Systems Design,” “Web Information Retrieval,” “Exploring Engineering,” “Capstone CS Design,” “Senior Design I,” “Senior Design II,” “Written and Oral Communicaitons,” “Technical Written and Oral Communications,” “Search Engines and Our Lives (Foundation Seminars).”

Received “Outstanding Teaching Achievement” award from the University of Texas - Pan American in 1999.

September 1994 - August 2001: taught graduate courses at University of Texas - Pan American “Simulation,” “Advanced Computer Networks,” “Parallel Computing,” “Performance Evaluation,” “Advanced Database Design and Implementation,” graduate seminars “Topics in Database and Operating Systems – Teradata database,” “Internet Protocols.”

taught undergraduate courses at University of Texas - Pan American “Computer Science I (C++),” “Computer Programming in a Second Language (Java),” “Database Design and Implementation,” “Computer Science I (Java),” “Computer Science I,” “Computers and Society,” “Applications Programming in C and C++,” “Operating Systems,” “Computer Architecture,” “Computer Networks.”

September 1991 - August 1994: taught undergraduate courses at Bucknell University “Data Structures,” “Introduction to Computer Science II,” “Analysis of Algorithms,” “Introduction to Microcomputer Environment,” “Performance Evaluation of Distributed Operating Systems.”

May 1988 - August 1991: taught at Worcester Polytechnic Institute graduate courses “Data Structures,” “Operating Systems,” intensive training course “Computer Networks,” undergraduate courses “Introduction to Computer Systems,” “Data Structures,” “Operating Systems.”

RESEARCH AND EQUIPMENT GRANT AWARD

- **Xiannong Meng** and Richard Fowler, “Wal-Mart and University of Texas - Pan American: Databases for Tomorrow’s Information Technology Professionals”, an equipment grant from Wal-Mart and NCR, estimated at \$7,000,000 and training courses of \$9,100, February 2000.
- **Xiannong Meng**, “Improve Web Search Accuracy by Using Individualized Profiles”, University of Texas - Pan American Faculty Research Council grant, \$1,520, March 1999.

- Intel Corporation's equipment grant "Establishing an Intel Systems Laboratory and Augmenting the Existing Advanced Studies Laboratory in the Department of Computer Science", (value \$70,000) Pearl Brazier, Richard Fox, Zhixiang Chen, and **Xiannong Meng** March 1999.
- Intel Corporation's equipment grant "Upgrading Existing Intel Donated Equipment", (value \$35,305), Richard Fox, **Xiannong Meng** and Pearl Brazier, September 1998.
- Co-recipient of NASA grant "Center for Remote Sensing in the Lower Rio Grande Valley of Texas" (value \$69,035) along with Dr. Frank Judd (PI) and others, Spring 1998.
- Co-recipient of IBM Corporation's equipment grant "IBM Cooperative Partnership Agreement", (value \$169,713) along with Dr. Wendy Fowler (PI) and Dr. Paul Taube, summer 1997.
- Co-recipient of Intel Corporation's equipment grant "Intel Computer Science Graduate Student and Upper Level Undergraduate Student Laboratory" (value \$67,694) along with Dr. Richard Fox(PI), May 1997.
- Collaborator of NASA "Initiative for Development of Minority Institute Research" grant (amount \$79,040, Principal Investigator: Dr. Edwin LeMaster and Dr. Richard Fowler), fall 1997, third year continuation.
- Collaborator of NASA "Initiative for Development of Minority Institute Research" grant (amount \$190,990, Principal Investigator: Dr. Edwin LeMaster and Dr. Richard Fowler), fall 1996, second year continuation.
- Collaborator of NASA "Initiative for Development of Minority Institute Research" grant (amount \$227,610, Principal Investigator: Dr. Edwin LeMaster and Dr. Richard Fowler), fall 1995.
- Co-recipient of Intel Corporation's equipment grant "Intel Computer Science Programming Laboratory" (value \$181,472, along with Dr. Wendy Fowler and Dr. Richard Fox), summer 1995.
- 1994 Faculty Research Council Grant, "Debugging Aid for Distributed Simulation", University of Texas - Pan American (amount \$1,100).
- 1993 Summer Scholarly Development Grants, Bucknell University (amount \$2,500).

RESEARCH AND GRANT PROPOSALS SUBMITTED

- Richard H. Fowler, **Xiannong Meng**, Wendy A. Lawrence-Fowler, Zhixiang Chen, Richard K. Fox, "Enabling Success in Computer Science through Mentoring, Research, and Leadership", \$1,160,853, a research proposal submitted to National Science Foundation: CISE Minority Institutions Infrastructure Program, February 1999, result: not funded.
- Richard H. Fowler, **Xiannong Meng**, Wendy A. Lawrence-Fowler, Zhixiang Chen, "Enabling Success in Computer Science through Mentoring, Research, and Leadership", \$1,495,865, a research proposal submitted to National Science Foundation, February 1998, result: not funded.
- **Xiannong Meng**, Wendy A. Lawrence-Fowler, Pearl W. Brazier, "Develop Multimedia Courseware to Aid Transition in *Introduction to Computer Science* Course", \$19,163.20, a grant proposal submitted to the University of Texas system, September 1997, result: not funded.
- **Xiannong Meng** "EMUNET: A Library To Assist Debugging Distributed Programs That Use MPI", \$56,478, a research proposal submitted to Texas Higher Education Coordinating Board, June 1997, result: Fund with Priority 2 (fund when money is available), in reality it was not funded.

- **Xiannong Meng** “Queueing Model For Parallel And Distributed Simulation”, \$30,153, a research proposal submitted to Texas Higher Education Coordinating Board, July 1995, result: Fund with Priority 2 (fund when money is available), in reality it was not funded.
- **Xiannong Meng**, “A Performance Analysis Model For Distributed Simulations”, \$105,448, a research proposal submitted to National Science Foundation, October 1994, result: not funded.

RESEARCH INTERESTS

Web information retrieval; Distributed computing systems; Local area networks; Metropolitan area networks; Operating systems; Parallel computing; Performance evaluation of communications networks and computer systems; Distributed simulations; Queueing theory.

RESEARCH EXPERIENCES

World Wide Web search: Using client side information to make Web search more accurate.

World Wide Web and GIS: Making GIS information accessible through WWW.

Debugging Distributed Programs: Designed and implemented EMUNET, a library that can help debugging distributed programs in TCP/IP based network.

Distributed simulation: Empirical study of distributed simulation using thread to objects to rollback instead of using actual copies of the objects; Metrics and indices of distributed simulations.

Distributed operating systems: Studied various distributed systems such as Mach, Amoeba, Sprite, V, Clouds, Charlotte, and related issues such as load sharing and process migration.

High-speed networks: Studied various high-speed network protocols such as ATM, DQDB, FDDI, Expressnet, Fasnet, TreeNet.

PUBLICATIONS

BOOK CHAPTER

1. **Xiannong Meng** and Song Xing, “Search Engine Performance Comparisons”, in Vijayan Sugumaran (ed.) *Distributed Artificial Intelligence, Agent Technology, and Collaborative Applications*, pp. 148–164. Information Science Reference, Hershey, PA, 2008, ISBN 978-1-60566-144-5 (hbk), 978-1-60566-145-2 (ebook).
2. **Xiannong Meng**, “Web Search Engine Architectures and their Performance Analysis”, in Coral Calero Munoz, M Angeles Moraga, and Mario Piattini (ed.), *HANDBOOK OF RESEARCH ON WEB INFORMATION SYSTEMS QUALITY*, pp. 491–509. Information Science Reference, Hershey, PA, 2008, ISBN 978-1-59904-847-5 (hbk), 978-1-59904-848-2 (ebook).
3. Song Xing, Bernd-Peter Paris, and **Xiannong Meng**, “Sampling Approaches on Collecting Internet Statistics in the Digital Economy”, in Mahesh S. Raisinghani (ed.) *Handbook of Research on Global Information Technology Management in the Digital Economy*, pp. 452–475, Information Science Reference, Hershey, PA, 2008, ISBN 978-1-59904-875-8 (hbk), 978-1-59904-876-5 (ebook).

4. **Xiannong Meng** and Zhixiang Chen, “MARS: Multiplicative Adaptive Refinement Web Search”, in Anthony Scime (ed.) *Web Mining: Applications and Techniques*, pp. 99-118, Ideas Group Publishing, Hershey, PA, 2005, ISBN: 1-59140-414-2 h/c and ISBN: 1-59140-415-0 s/c.
5. **Xiannong Meng** and Zhixiang Chen, “Web Search via Learning from Relevanc Feedback”, in Mehdi Khosrow-Pour (Ed.) *Encyclopedia of Information Science and Technology*, Volume V, pp. 3060–3064, 2005, Ideas Group, Hershey, PA, ISBN: 1-59140-553-X.
6. Zhixiang Chen, Binhai Zhu and **Xiannong Meng**, “Intelligent Web Search Through Adaptive Learning from Relevance Feedback”, in Shi Nansi (eds.), *Architectural Issues of Web-Enabled Electronic Business*, pp. 139-153, Idea Group Publishing, Hershey, PA, 2003, ISBN 1-59140-049-X.

PEER-REVIEWED JOURNALS

7. **Xiannong Meng**, Song Xing, and Ty Clark, “An Empirical Performance Measurement of Microsoft’s Search Engine and its Comparison with other Major Search Engines”, *International Journal of Intelligent Information Technologies*, Vol. 3, No. 2, 2007, pp. 65-81 Ideas Group Publishing, Hershey, PA.
8. Zhixiang Chen, **Xiannong Meng**, Binhai Zhu and Richard Fowler, “WebSail: From On-line Learning to Web Search”, *Journal of Knowledge and Information Systems*, Volume 4, Number 2, pp. 219-227, March 2002, Springer-Verlag, London
9. Zhixiang Chen, **Xiannong Meng** and Richard Fowler, “Features: Real-Time Adaptive Feature and Document Learning for Web Search”, *Journal of the American Society for Information Science and Technology*, Volume 52, Number 8, pp. 655-665, June 2001, John Wiley & Sons Publisher, New York, NY.
10. Richard Fox, Zhixiang Chen and **Xiannong Meng** “Artificial Intelligence Techniques Applied to Search Engines”, *Journal of Computer Science and Information Management*, Volume 3, Number 3, September 2000, pp. 25-34, Maximilian Press Publishers.
11. Zhixiang Chen, **Xiannong Meng**, Richard H. Fowler, “Search the Web with Queries”, *Journal of Knowledge and Information Systems*, Volume 1, Number 3, pp. 369-375, August 1999, Springer-Verlag, London
12. **Xiannong Meng**, “Distributed Simulations — Issues and Implementations in Cluster of Workstations Environment”, *International Journal of Computer Systems Science and Engineering*, 1999 Vol. 14, No. 1, pp. 27-37, publisher: CRL Publishing Ltd, London, UK.
13. David Finkel, **Xiannong Meng**, Sanjay Parikh, “Load Sharing That Supports Fault Tolerance in a Distributed Computing System”, *International Journal of Computer Systems Science and Engineering*, 1994 Vol. 9, No. 4, pp. 246-254, publisher: CRL Publishing Ltd, London, UK.

PUBLISHED CONFERENCE PROCEEDING PAPERS

14. Keith Buffinton, **Xiannong Meng**, and Margot Vigeant, “Exploring Engineering in China in a Global and Societal Context”, Poster session at the ASEE 2013 International Forum, Atlanta, GA, U.S.A., June 22, 2013.
15. **Xiannong Meng** and Song Xing, “Computer Network Courses in Undergraduate Computer Science Curriculum”, in the *Proceedings of the 2012 Conference of the International Information Management Association*, Chicago, IL, U.S.A., October 15-17, 2012.

16. **Xiannong Meng**, Song Xing, and Wang Wei, “Survey and Analysis of Courses on the Subject of Information Retrieval and Web Search”, in the *Proceedings of the 2012 ASEE Annual Conference and Exposition*, San Antonio, TX, U.S.A., June 10-13, 2012.
17. **Xiannong Meng** and Song Xing, “Teaching Web Information Retrieval and Network Communication Technology to Non-Major Undergraduate Students”, in the *Proceedings of the 2011 ASEE Annual Conference and Exposition*, Vancouver, B.C., Canada, June 26-29, 2011.
18. Song Xing and **Xiannong Meng**, “Internet Statistical Measurement for Implementation of 4G Wireless Networks”, in the *Proceedings of the First International Conference on Advanced Computing and Communication*, pp. 27-32. Orlando, Florida, USA. September 15-17, 2010.
The paper won the “Best Paper Award” of the conference.
19. Song Xing, **Xiannong Meng**, and Gang Wang, “Internet Statistical Measurement – Sampling through Overbiasing”, in the *Proceedings of the Third International Conference on Advanced Computer Theory and Engineering*, pp. v2.159-v2.163. Chengdu, China. August 20-22, 2010.
20. Rishav Chakravarti and **Xiannong Meng**, “A Study of Color Histogram Based Image Retrieval”, in the *Proceedings of the 6th International Conference on Information Technology: New Generations*, CD-ROM, Las Vegas, Nevada, U.S.A. April 27-29, 2009.
21. Song Xing, **Xiannong Meng**, and Yonggao Yang, “Approaches on Internet Growth Measurement: Hostname-Based vs. Address-Based”, in the *Proceedings of the 2007 International Conference on Internet Computing*, Las Vegas, Nevada, U.S.A. June 25-28, 2007.
22. **Xiannong Meng**, L. Felipe Perrone, and Maurice Aburdene, “Hands-on Projects in Wireless and Mobile Computer Network Courses”, 2006 ASEE Annual Conference & Exposition, Chicago, Illinois, June 18-21, 2006.
23. **Xiannong Meng**, “A Comparative Study of Performance Measures for Information Retrieval Systems”, poster presentation, in the *Proceedings of the The Third International Conference on Information Technology: New Generations* pp. 578-579, Las Vegas, NV, April 10-12, 2006.
24. Song Xing, Bernd-Peter Pari, and **Xiannong Meng**, “Collecting the Internet Statistics”, *Proceedings of The 2005 International Conference on Modeling, Simulation and Visualization Methods*, June 27-30, 2005, Las Vegas, NV.
25. **Xiannong Meng**, Song Xing, and Ty Clark, “An Empirical Performance Measurement of Microsoft’s Search Engine”, *Proceedings of the 2005 International Conference on Data Mining*, pp. 30-36, June 20-23, 2005, Las Vegas, NV.
26. **Xiannong Meng** and Ty Clark, “An Empirical User Rating of Popular Search Engines Using *RankPower*”, *Proceedings of the 2005 International Conference on Information Technology*, April 4-6, 2005, Las Vegas, NV.
27. Maurice F. Aburdene, **Xiannong Meng**, Luis Felipe Perrone, and Gregory L. Mokodean, “Analysis of Wireless and Mobile Computer Networks Courses”, *Proceedings of the 2005 ASEE Annual Conference and Exposition (CD-ROM)*, Information Science Division, Session 3558: Internet Computing and Networking, June 13-15, 2005, Portland, OR.
28. Luis Felipe Perrone, Maurice F. Aburdene, and **Xiannong Meng**, “Approaches to Undergraduate Instructions in Computer Security”, *Proceedings of the 2005 ASEE Annual Conference and Exposition (CD-ROM)*,

Electrical & Computer Engineering Division, Session 1532: Electrical and Computer Engineering Poster Session, June 13-15, 2005, Portland, OR.

29. Margot A.S. Vigeant, James W. Baish, Daniel Cavanagh, Thomas DiStefano, Richard J. Kozick, *Xiannong Meng*, Thomas Rich, P. Aarne Vesilind, and Ronald D. Ziemian, "Ethics for First-Year Engineers: The Struggle to Build a Solid Foundation", *Proceedings of the 2005 ASEE Annual Conference and Exposition (CD-ROM)*, Freshmen Programs Division, Session 1453: Social Responsibility & Professionalism, June 13-15, 2005, Portland, OR.
30. **Xiannong Meng**, "Effectiveness of Dynamic Clustering Techniques in Real-time Web Search System", *Proceedings of the 2004 International Conference on Internet Computing*, pp. 503-509, June 21-24, 2004, Las Vegas, NV.
31. **Xiannong Meng** and Zhixiang Chen, "On User-oriented Measurements of Effectiveness of Web Information Retrieval Systems", *Proceedings of the 2004 International Conference on Internet Computing*, pp. 527-533, June 21-24, 2004, Las Vegas, NV.
32. Maurice F. Aburdene, **Xiannong Meng** and Gregory L. Mokodean, "Analysis of Computer Network Courses in Undergraduate Computer Science, Electrical Engineering and Information Science Programs", *Proceedings of the 2004 ASEE Annual Conference and Exposition*, CD version, June 20-23, 2004, Salt Lake City, UT.
33. **Xiannong Meng** and Zhixiang Chen, "Personalized Web Search with Clusters", *Proceedings of the 2003 International Conference on Internet Computing*, pp. 46-52, June 23-26, 2003, Las Vegas, NV.
34. Christopher Harm and **Xiannong Meng**, "Feasibility Study of Real-Time RSA Encryption in Mobile Computing", *Proceedings of the 2003 International Conference on Internet Computing*, pp. 627-632, June 23-26, 2003, Las Vegas, NV.
35. **Xiannong Meng**, "Putting Information Retrieval Theory Into Practice", *Proceedings of the 2003 ASEE Annual Conference and Exposition*, CD version, June 22-25, 2003, Nashville, TN.
36. Maurice Aburdene, John Janzi, and **Xiannong Meng**, "Creating And Testing VLANs Using Network Switches", *Proceedings of the 2003 ASEE Annual Conference and Exposition*, CD version, June 22-25, 2003, Nashville, TN.
37. **Xiannong Meng**, Zhixiang Chen, and Amanda Spink, "A Multiplicative Gradient Descent Search Algorithm for User Preference Retrieval and its Application to Web Search", *Proceedings of the 2003 International Conference on Information Technology: Coding and Computing*, pp. 150-154, Las Vegas, April 28-30, 2003, IEEE Computer Society, Los Alamitos, CA.
38. Zhixiang Chen and **Xiannong Meng**, "MARS: Applying Multiplicative Adaptive User Preference Retrieval to Web Search", *Proceedings of the 2002 International Conference on Internet Computing*, pp. 643-648, CSREA Press, Las Vegas, Nevada, June 24-27, 2002.
39. **Xiannong Meng** and Zhixiang Chen, "PAWS: Personalized Adaptive Web Search", *Abstract Proceedings of WebNet 2001*, pp. 40, AACE, Norfolk, VA, full paper in CD form of conference proceedings, October 23-27, 2001.
40. **Xiannong Meng** and Zhixiang Chen, "The Architecture of Yarrow: A Real-Time Intelligent Meta-Search Engine", *Proceedings of Internet Computing 2001*, pp. 7-13, CSREA Press, Las Vegas, Nevada, USA, June 25-28, 2001.

41. Zhixiang Chen and **Xiannong Meng** “Yarrow: A real-time client side meta search learner”, *Proceedings of AAAI 2000 Workshop on AI for Web Search*, pp. 12-17, publisher: AAAI Press, Menlo Park, CA 94025, ISBN 1-57735-116-9, Austin, TX, July 30, 2000.
42. **Xiannong Meng**, Zhixiang Chen, “Feasibility of Adding Filtering Process in Web Browser to Improve Web Search Accuracy”, *Proceedings of the 2000 International Conference on Parallel and Distributed Processing Techniques and Applications*, pp. 1809-1816, publisher: CSREA Press, ISBN 1-892512-50-5, Las Vegas, Nevada, June 2000.
43. Zhixiang Chen, **Xiannong Meng**, Binhai Zhu, and Richard Fowler, “WebSail: From on-line learning to web search”, *Proceedings of the First International Conference on Web Information Systems Engineering (WISE’00)*, pp. 192-199, Hong Kong, China, June 2000.
44. Praveen Bobba, Juan DeAnda, and **Xiannong Meng**, “Load Monitoring and Load Sharing Under WindowsNT”, *Proceedings of ETCE/OMAE 2000 Joint Conference — Energy for the New Millennium*, CD-ROM, Feb 14-17, 2000, New Orleans, LA.
45. **Xiannong Meng**, Zhixiang Chen, “Personalize Web search using information on client’s side”, *Proceedings of the Fifth International Conference of Young Computer Scientists*, pp. 985-992, International Academic Publishers, Nanjing, P.R.China, August 17-20, 1999.
46. Zhixiang Chen, **Xiannong Meng**, Richard Fox, “Efficient algorithms for learning decision trees over large domains”, *Proceedings of the Fifth International Conference of Young Computer Scientists*, pp. 31-38, International Academic Publishers, Nanjing, P.R.China, August 17-20, 1999.
47. Pablo Gonzales and **Xiannong Meng**, “The Use of MPI in a Robot’s Distributive Network”, *Proceedings of the Thirteenth International Conference on Systems Engineering (ICSE 99)*, (Las Vegas, Nevada, August 9-12, 1999), pp. CS-37 – CS-42, International Council on Systems Engineering.
48. Richard Fox, **Xiannong Meng**, Zhixiang Chen, and Wendy Lawrence-Fowler, “Personalized Search Engine to Classify World Wide Web Documents”, *Proceedings of the 17th Association of Management/International Association of Management Annual Conference*, Computer Science Division, pp. 17-22, San Diego, CA, August 5-8, 1999.
49. Michael L. Nelson, **Xiannong Meng**, and Pearl Brazier, “CSI: Language & Paradigm Issues”, *Proceedings of the 17th Association of Management/International Association of Management Annual Conference*, Computer Science Division, pp. 353-357, San Diego, CA, August 5-8, 1999.
50. Zhixiang Chen, **Xiannong Meng**, Richard Fox, Richard Fowler, “Applications of multilayer feed-forward networks on WWW document search”, *Proceedings of the 1999 International Joint Conference on Neural Networks*, Washington D.C., July 10-16, 1999.
51. Zhixiang Chen, Richard Fox, **Xiannong Meng**, Richard Fowler, “Training perceptrons for document search over the World Wide Web”, *Proceedings of the International Symposium on Optical Science, Engineering, and Instrumentation*, SPIE’99, Denver, CO, July 18-23, 1999.
52. Richard Fox, **Xiannong Meng**, Zhixiang Chen, Richard Fowler, and Wendy Lawrence-Fowler, “Strategies for Personalized Search Engines”, *Proceedings of the International Conference on Artificial Intelligence (IC-AI ’99) Volume 2*, H. R. Arabnia editor, pages 647-650, 1999, CSREA Press.
53. Zhixiang Chen, **Xiannong Meng**, Richard H. Fowler, “Learning in search for World Wide Web documents with queries”, *Proceedings of Tenth Midwest Artificial Intelligence and Cognitive Science Conference (MAICS’99)*, April 23-25, 1999, Indiana University, Bloomington, Indiana. AAAI: Menlo Park, CA.

54. Michael L. Nelson, Juan R. DeAnda, Richard Fox, **Xiannong Meng**, "A Software Control Architecture for Autonomous Vehicles," *Proceedings of AeroSense 99: SPIE's 13th Annual International Symposium on Aerospace/Defense Sensing Simulation and Controls*, Orlando, FL, April 5-9, 1999, SPIE Publication.
55. Wendy Lawrence-Fowler, Jorge Williams, Richard Fowler, and **Xiannong Meng**, "Personalizing the Web through Interactive Content-based Indexing", *Proceedings of the WebNet'98*, pp. 551-556, Orlando, FL, November 7-12, 1998. AACE: Charlottesville, VA.
56. **Xiannong Meng**, Wendy A. Lawrence-Fowler, Richard H. Fowler, Zhixiang Chen, and Richard K. Fox, "A Parallel Computing Architecture for Information Process: Visualizing, Indexing, and Mining", work-in-progress paper, *Proceedings of the WebNet'98*, Orlando, FL, November 7-12, 1998.
57. Zhixiang Chen, Richard K. Fox, and **Xiannong Meng**, "On Learning Decision Trees with Module Nodes", the 16th Annual Conference of the International Association of Management, Computer Science Division, Chicago, IL, August 5-8, 1998. Appeared in 1998 Proceedings Supplement, Computer Science Section, pp. 1-6.
58. **Xiannong Meng**, "Empirical Study of Java Interprocess Communication In WindowsNT Environment", *The Proceedings of The Society For Computer Simulation's 1998 Symposium on Performance Evaluation of Computer And Telecommunication Systems*, (part of 1998 Summer Computer Simulation Conference), pp. 238-241, July 19-22, 1998, Reno, Nevada. Publisher: The Society for Computer Simulation International, San Diego, CA.
59. Wendy A. Lawrence-Fowler, **Xiannong Meng**, Richard H. Fowler and Zhixiang Chen, "A Parallel Computing Architecture for Information Processing over the Internet", *Proceedings of the Fourth International Conference on Information Systems Analysis and Synthesis*, pp. 265-271, Orlando, FL, July 12-16, 1998. International Institute of Informatics and Systemics.
60. Zhixiang Chen and **Xiannong Meng**, "A Faster Algorithm for Learning Decision Trees With Module Nodes", *Proceedings of the Ninth Midwest Artificial Intelligence and Cognitive Science Conference*, page 83-90, March 20-22, 1998, Wright State University, Dayton, Ohio.
61. **Xiannong Meng**, Richard Fowler, Eric Rieken, "Gis2web And Its Inter-Application Communications Issues", *Proceedings of the Sixth International Conference on Computer Communications and Networks*, page 427-430, IEEE Computer Society, Los Alamitos, CA, ISBN 0-8186-8186-1, September 22-25, 1997, Las Vegas, Nevada.
62. **Xiannong Meng**, Richard Fowler, Eric Rieken, "Bridging the Gap Between GIS and the WWW", Poster presentation at and in *The Proceedings of the Sixth International World Wide Web Conference (CDROM)*, 709(1-7), April 7 - 11, 1997, Santa Clara, California.
63. **Xiannong Meng**, "EMUNET: A Debug Aid for Distributed Programs in TCP/IP Based Network", *Proceedings of the IEEE International Performance, Computing, and Communications Conference*, page 101-107, IEEE, Piscataway, NJ, ISBN 0-7803-3873-1, February 5-7, 1997, Tempe, Arizona
64. **Xiannong Meng**, "Synchronizations and Rollbacks in Optimized Distributed Simulation Scheme", *Proceedings of Mid-America Emerging Technologies'96*, page 43-48, October 28-29, 1996, University of Oklahoma, Norman, Oklahoma.
65. **Xiannong Meng**, "Debugging Aid for Distributed Programs in TCP/IP Based Network", *Proceedings of 1996 IASTED International Conference on Networks*, page 193-196, Acta Press, Anaheim, CA, ISBN 0-88986-191-9, January 8-10, 1996, Orlando, Florida.

66. **Xiannong Meng**, “Distributed Simulation in A Loosely Coupled Environment Using the TCP/IP Protocol”, *Proceedings of the IEEE Fourteenth Annual International Phoenix Conference on Computers and Communications*, page 122-127, IEEE Piscataway, NJ, ISBN 0-7803-2492-7, March 28-31, 1995, Scottsdale, Arizona.
67. **Xiannong Meng**, “A Space Efficient Algorithm for Optimistic Distributed Discrete Event Simulation”, *Proceedings of the Third International Conference for Young Computer Scientists*, page 9.81-9.82, ISBN 7-302-00888-4, July 1993, Beijing, China.
68. **Xiannong Meng**, “An Empirical Study of Distributed Simulation in a Loosely Coupled Environment”, *Proceedings of IASTED International Conference on Modelling and Simulation*, Pittsburgh’93, May 1993, Pittsburgh, Pennsylvania, U.S.A.
69. David Finkel, **Xiannong Meng**, Sanjay Parikh, “A Simulation Study of An Integrated Fault Tolerant and Load Sharing Distributed Computing System”, Presented at 1992 Summer Computer Simulation Conference, July 1992, Reno, Nevada, Appeared in *Proceedings of the International Conference on Simulation in Engineering Education*, Charles Knadler and Hamid Vakilzadian (eds.), pp. 230-234, Vol. 25:3, 1993, Simulation Councils, Inc.
70. Robert Kinicki, **Xiannong Meng**, “Delay Analysis of a Ring-Based, Two-Level, Asymmetric Metropolitan Area Network”, *Proceedings of the IASTED International Conference on Modelling and Simulation*, pp.69 - 73, July 1991, Calgary, Canada.
71. **Xiannong Meng**, Robert Kinicki, “Simulation of A Two-level, Ring-based Metropolitan Area Network with Multiple Classes of Traffic”, *Proceedings of Pittsburgh Conference on Modeling and Simulation*, pp. 1219-1224, May 1990.
72. **Xiannong Meng**, Robert Kinicki and Timothy Gonsalves, “Delay Analysis of a Metropolitan Area Network”, *Proceedings of the IEEE International Phoenix Conference on Computers and Communications*, Scottsdale, Arizona, pp. 568-574, March 1990.
73. **Xiannong Meng** and Timothy Gonsalves, “On the Accuracy of the Mean Value Analysis Algorithm”, *Proceedings of Pittsburgh Conference on Modeling and Simulation*, pp. 991-995, May 1989.
74. **Xiannong Meng**, Mohammad Sanati and T.C. Ting, “Graphical Representations of Sorting Algorithms”, demonstrated at IBM Conference of Computer Use in Education, 1986.

PUBLISHED REVIEWS

75. **Xiannong Meng**, [Review of the article “Waves: a fast multi-tier top-k query processing algorithm” by Daoud et.al. in *Information Retrieval* 20(3):292-316, 2017.]
Computing Reviews, December 28, 2017.
http://www.computingreviews.com/review/review_review.cfm?review_id=145736
76. **Xiannong Meng**, [Review of the book *Algorithms for data science* by Steele B., Chandler J., Reddy S., Springer International Publishing, New York, NY, 2017.]
Computing Reviews, September 11, 2017.
http://www.computingreviews.com/review/review_review.cfm?review_id=145531
77. **Xiannong Meng**, [Review of the article “Urban planning and building smart cities based on the Internet of Things using big data analytics” by Rathore M., Ahmad A., Paul A., Rho S. in *Computer Networks*,

101 63-80, 2016.]

Computing Reviews, Augst 9th, 2017.

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113. Robert Kinicki, **Xiannong Meng**, “Design Consideration of Metropolitan Area Network Based on Their Delay Analysis”, Computer Science Technical Report #92-1, Bucknell University, February 1992.

COLLOQUIUM

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115. **Xiannong Meng**, “Distributed Programming and Debugging”, University of Texas - Pan American Computer Science Department Colloquium Series, April 10, 1997

116. **Xiannong Meng**, “Distributed Simulations — Issues and Lessons”, University of Texas - Pan American Computer Science Department Colloquium Series, February 22, 1996

MEMBERSHIP

- Association for Computing Machinery (September 1985 - present)
- Institute of Electric and Electronics Engineers (January 1987 - present)
- American Society for Engineering Education (June 2002 - present)
- The Society for Computer Simulation (June 1998 - May 2001)
- USENIX (March 1990 - January 1995)

OTHERS

- Member of the Program Committee for the 27th AAAI (2013) AIW (AI and Web), Bellevue, WA, U.S.A. July 14-18, 2013.
<http://www.aaai.org/Conferences/AAAI/2013/aaai13aiwcall.php>
- Member of the Technical Program Committee for “The Second International Conference on Cloud Computing, GRIDs, and Virtualization” CLOUD COMPUTING 2011, September 25-30, 2011 - Rome, Italy.
<http://www.iaria.org/conferences2011/ComCLOUDCOMPUTING11.html>
- Member of Technical Program Committee for the *Grid, Cluster and Cloud Computing Track* of The 16th International Conference on Parallel And Distributed Systems, December 8-10th, 2010, Shanghai, China.
<http://grid.sjtu.edu.cn/icpads10/>
- Member of the Technical Program Committee for “The First International Conference on Cloud Computing, GRIDs, and Virtualization” CLOUD COMPUTING 2010, November 21-26, 2010 - Lisbon, Portugal.
<http://www.iaria.org/conferences2010/ComCLOUDCOMPUTING10.html>
- Reviewer for *Computing Reviews*
- Serve as a member of the International Review Board for the *International Journal of Web Services Research*
- Member of Editorial Review Board of Scientific Journals International since October 2007
- Serve on as a reviewer for technical papers on IEEE ICCCN conference 2002 through 2007
- Serve on the Program Committee of the 2006 IEEE International Conference on Web Services (ICWS 2006)
- Serve as a program committee member of the 1999, 2000, 2001, 2002, and 2003 International Symposium on Performance Evaluation of Computer And Telecommunication Systems (SPECTS)
- Serve as a program committee member of the 2002, 2003, and 2004 International Conference on Computer Communication and Network (IC3N)
- Serve as a program committee member of the 2000 International Conference on Parallel and Distributed Processing Techniques and Applications

- Serve as a member of the Program Committee for the Fifth International Conference for Young Computer Scientists (ICYCS'99) to be held in Nanjing, China August 1999, sponsored by China Computer Federation.
- Served as a member of International Program Committee for the 1996 IASTED International Conference on Networks to be held in Orlando, Florida. (IASTED: International Association of Science and Technology for Development).
- Reviewed articles for various journals and conferences including *Journal of Computer Systems Science & Engineering*, *SIGMETRICS*, *Internetworking: Research and Experiences*, *Performance Evaluation Review*, *IASTED Network Conference*, *International Symposium on Performance Evaluation of Computer and Telecommunication Systems*
- Reviewed book manuscripts *Scientific Computing: An Introductory Survey*, *Problems on Algorithms, Classic Data Structure in C++*, *Problem Solving, Abstraction & Design Using C++*
- Reviewed book chapters and prospectus *The Most Complex Machine, Prospectus for a Pre-CS1 Text*.
- Served on IEEE Task Force on Cluster Computing
- Served as an external reviewer for tenure and promotion cases for a number of U.S. higher education institutions.
- Serve on various university, college, and department committees at Bucknell University
- Served on various university, college, and department committees at the University of Texas - Pan American. Elected as vice chair of the University Library Committee in 1999. Elected as the secretary of the University Academic Computer Council in 2000.