

Vita

Wendy Zhang, Ph.D.

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EDUCATION:

Ph.D. Computer Science, University of Houston, Texas, 2001
M.S. Computer Science, University of Houston, Texas, 1983
B.S. Computer Software Engineering, Jiaotong University, China, 1979

ACADEMIC EXPERIENCE:

Since 1985 as active member of Southern University at New Orleans and University of Houston, I have been teaching undergraduate and graduate core courses in Computer Science and Information Systems. These courses include languages (COBOL, RPG II & II, Pascal, FORTRAN, C, C++, Visual Basic), Operating Systems (UNIX and Windows), Database Management Systems, Data Communication and Network, Programming Logic, System Analysis and Design, Microcomputers, Algorithm Design, Data Structure, File Processing, Web Development Techniques, Client-Server System Development, and Fundamentals of Information Systems.

2006 – present Associate Professor, Computer Science & IT Department, SLU
2001 - 2006 Associate Professor, Graduate Studies Program, Computer Information Systems (CIS) Department, Southern University at New Orleans (SUNO), Louisiana
1998-2001 Assistant Professor, CIS Department, SUNO
1995-1998 Lecturer, Computer Science Department, University of Houston, Texas
1994-1995 Acting Chairperson, CIS Department, SUNO
1985-1994 Assistant Professor, CIS Department, SUNO
1980-1983 Teaching Assistant, Computer Science Department, University of Houston, Texas
1975-1980 Software Engineer, Shanghai Pharmaceutical Industry Design Institution, Shanghai, China

REFEREED PUBLICATIONS:

1. Zhang, W, and S. Sriharan, 2005. "Using Hyperspectral Remote Sensing for Land Cover Classification", [Proc. SPIE Vol. 5655](#), p. 261-270.
2. Co-author with D. Hayes and N. Vu, 2004. "Creating Geographic Footprint From LIDAR Data In ArcGIS", Proceedings of IGARSS 2004 Conference, Anchorage, Alaska, USA.
3. Co-author with B.W. Gilyot, D. Alijani, and D. Thangada. *Decision Support Systems: A Study of Telework Initiatives*. Information Systems Education Journal, Volume 2, Number 16, February 12, 2004, EDSIG. ISSN: 1545-679X.
4. Zhang, W. *Spectral Analysis and Classification of Hyperspectral Data*. NASA Scientific and Technical Document. October 2003. Document Number: SE-2003-08-00054-SSC.
5. Zhang, W. *GIS and Mapping*. NASA Scientific and Technical Document. October 2003. Document Number: SE-2003-08-00053-SSC.
6. Co-author with X. Feng and Leiss, E. L. *I/O Performance Improvement through the Use of Compiler-Driven Memory Management*. Has been accepted by the XXVII Conferencia Latinoamericana de Information (CLEI 2002).
7. Zhang, W. and Leiss, E. L. *Compiler Time Data Transfer Analysis*. Proceedings of 2002 5th International Conference on Algorithms and Architectures for Parallel Processing (ICA³PP 2002), Beijing, China, October 23-25, 2002, pp. 222-225, the IEEE Computer Society, ISBN: 0-7695-1512-6.
8. Zhang, W. *Surface Cover Classification of SSC Using AVIRIS Data*. NASA Scientific and Technical Document. September 2002.
9. Zhang, W. and Leiss, E. L. *Compiler-Driven Runtime I/O Minimization*. Proceedings of the XXVII Conferencia Latinoamericana de Information, Merida, Venezuela, pp. 42, September 24-27, 2001, ISBN: 980-11-0528-3.
10. Zhang, W. and Leiss, E. L. *A Compiler Driven Out-of-Core Programming Approach for Optimizing Data Locality in Loop Nests*. Proceedings of the 2001 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'2001), pp. 41-47, Las Vegas, Nevada, USA, June 25-28, 2001. ISBN: 1-892512-66-1

CURRICURUM DEVELOPMENT:

2000 Submitted the proposal for the BS in CIS curriculum based on the “Criteria for Accrediting Program in Information Systems” 97 version and August 2000 draft version 5.2 with state-of-the-art technology.

1995 Prepared the five-year budget and initial Graduate Program curricula in Computer Information Systems that was presented to the Justice Department

1995 Wrote a joint proposal to the International Scholar Exchange Program with the College of Business and received a Full Bright scholar for a faculty from the International Business School of Shanghai University, China

1994 Reviewed and changed the CIS courses

1988 Co-founder of proposal and curricula for offering a four-year degree program in Computer Science in SUNO

Since 1985, I have been involved in design and teaching of **new** courses:

- UNIX and C, Programming Logic, Visual Basic, Database Management Systems, Data Structure, Microcomputers, Client-Server Development

RESEARCH AND DEVELOPMENT

a. Fellowship

NASA Faculty Fellowship Program (NFFP), Stennis Space Center, 2002.

NASA Faculty Fellowship Program (NFFP), Stennis Space Center, 2003.

b. Senior and Special Project Supervision, Thesis Committee

Supervising over thirty (30) CIS students in Senior Project and Special Project courses from 1990 -1995.

Chair and committee member for graduate students’ thesis

c. Book Review

Website Design, Development, and Maintenance, Scott/Jones Publish, January 2001

d. Presentation

Geographic Information System & Spectral Analysis of Hyperspectral Data, presented at 2003 NASA Faculty Fellows End of Summer Presentations at Stennis Space Center, Mississippi, August 5, 2003.

Telework Initiatives - A Comparison of State Ranking presented at the 19th Annual Conference for Information Systems Educators, San Antonio, Texas, November 3, 2002.

Compile Time Data Transfer Analysis, presented at 2002 5th International Conference on Algorithms and Architectures for Parallel Processing in Beijing, China, October 22, 2002.

Classification of SSC Using AVIRIS Data, presented at NASA Faculty Fellowship Program in Stennis Space Center, Mississippi, August 8, 2002.

Compiler-Driven Runtime I/O Minimization, presented at the XXVII Conferencia Latinoamericana de Informacion in Merida, Venezuela, September 27, 2001.

Compiler Driven Out-of-Core Programming Approach for Optimizing Data Locality in Loop Nests, presented at the 2001 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'2001) in Las Vegas, Nevada, USA, June 25, 2001.

Block Mapping - A Compiler Driven I/O Management Study, presented at the 2000 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'2000) in Las Vegas, Nevada, USA, June 26, 2000.

e. Refereeing

Critique the paper submitted to the Information Systems Education Conference 2003, June 2003.

Member of Program Committee and technical review of *IEEE the 5th International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP 2002)*, 2002.

Session Chair of *Mobile Computing + Wireless Networks + Communication Issues/Interconnection Networks*, PDPTA'2000, June 29, 2000.

f. Grant Proposal Submitted

- 2005, CPI, "Implementation of an Enhanced E-learning Course Delivery System", submitted to Louisiana Board of Regent, November 14, 2005, funded \$67,785.
- 2005, CPI, "Enhancement of Classroom Instructions Via Integrating Computer Technology into The Classroom", submitted to Louisiana Board of Regent, November 14, 2005, funded \$48,209.
- 2004, PI, "Using Hyperspectral Remote Sensing for Material Classification", submitted to Air Force Summer Faculty Fellowship Program (SFFP), December 20, 2005.
- 2004, CPI, "Curricula Enhancement of Management Information Systems", submitted to Traditional and Undergraduate Enhancement, Louisiana Board of Regent, October 20, 2004, funded \$65,200.
- 2004, CPI, "In-House Distance Learning System", submitted to Supporting Electronic Learning and Essential Campus Transitions (SELECT), Louisiana Board of Regent, October 15, 2004, funded \$49,314.
- 2003 PI, *Women's International Science Collaboration (WISC) Grant Proposal*, submitted to American Association for Advancement of Science on July 8, 2003, \$5000
- 2002, PI of the grant of \$10,000 entitled "Input/Output Data management for Earth Science Hyperspectral Data," NASA Faculty Awards for Research (FAR) 2002, contract no. NRA 02-OEOP-05.

WORKSHOPS, SHORT COURSES, AND CONFERENCES

Since 1985, I have participated in over forty workshops, short courses, and conference including:

a. Workshops

- *The HBCU Summer Faculty GIS Workshop*, Washington, DC, August 11-14, 2003.
- *Faculty development Workshop on Remote Sensing and GPS*, Elizabeth City, NC, May 12-16, 2003.
- *Louisiana Statewide HBCU Grantsmanship Workshop*, SUNO, April 2002
- *Creating ASP.NET Server Controls Workshop*, Kenner, March 2002
- *Microsoft Windows XP Launch*, Kenner, November 2001
- *Developing Responsive and Competitive LEQSF (BRSF) Proposals Workshop*, SUNO, October 1999
- *Undergraduate Faculty Enhancement Computer Graphics Workshop*, NSF-SIGGRAPH, Georgia State University, August 1993
- *Introductory Supercomputer Workshop*, PANCOMP USA Supercomputer Institute, University of Georgia, January 1988

b. Short Courses

- *Introduction to ArcGIS I* (36 Hours of Classroom Instruction), Environment System Research Institute, Inc. August 2003
- *Introduction to Visual Basic.Net Programming*, NSF Chautauqua-Type Short Course for College Teachers, University of Dayton, June 2003
- *Creating Course Materials for the World Wide Web*, National Science Foundation Chautauqua-Type Short courses for College Teachers, University of Texas at Austin, May 2000
- *Internet Based Telecomputing*, National Science Foundation Chautauqua-Type Short courses for College Teachers, University of Texas at Austin, June 1995
- *VLSI Design and Testing*, National Science Foundation and Louisiana Stimulus for Excellence in Research Program, University of New Orleans, January, 1994

c. Conferences

- *The 19th Information System Education Conference (ISECON 2002)*, San Antonio, Texas, November 1-3, 2002.
- *The 5th International Conference on Algorithms & Architectures for Parallel Processing*, Beijing, China, October 23-25, 2002.
- *The XXVII Conferencia Latinoamericana de Informacion*, Merida, Venezuela, September 24-27, 2001
- *Roadmap to Opportunities*, Board of Regents and the National Science Foundation LA EPSCoR, Baton Rouge, April 2001

- *The 2001 & 2000 International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'2000 & 2001)*, Las Vegas, Nevada, USA, June 2000 & 2001
- *Race, Gender & Class*, New Orleans, October 2000
- *Louisiana Research and Technology Summit*, Baton Rouge, October 2000
- *30th Annual Meeting of the Decision Sciences Institute*, New Orleans, November 1999
- *Louisiana: Vision 2020, State of Louisiana Master Plan for Economic Development*, Baton Rouge, March 1999
- *Conference on Preparing Future Scientists*, Atlanta, March 1995
- *Statewide Conference for Teaching Science and Mathematics at the Undergraduate level*, Baton Rouge, January 1995
- *The Fifty-Sixth Annual Meeting of the Conference of Louisiana Colleges and Universities*, New Orleans, 1994
- *21st Annual Computer Science Conference*, ACM, Indianapolis, February 1993

COMMITTEES

Chair:

- Self Study Consortial Relations and Contract Agreement committee (SACS), 1998 –1999
- Search Committee for CIS Faculty, 1992, 1993, 1994
- The CIS Tenure and Promotion Committee, 1993
- The Ad Hoc Budget Review Subcommittee on Salary, 1992

Member:

- Search Committee for the Assistant/Associate Professor of Urban Education, 2003
- Faculty Senator Elected at Large, 2002 –2004
- Graduate Studies Program Tuition Committee, 2002
- NCATE Standard 1: Knowledge, Skills, and Dispositions Committee, 2002
- NCATE Standard 4:Diversity Committee, 2002
- Secretary II of CIS/GSP Search Committee, 2002
- Bookstore and University Center Standing Committee 2000-2001
- Logistics and Hospitality Committee, 2000
- Admissions and Retention Committee, 1999-2000, 1991
- CIS Faculty Status Committee, 1998
- Faculty Review Committee, 1993 –1995
- University Retrenchment Committee, 1993
- Systemic Initiatives of Reform Math and Science Education Committee, 1991
- Search Committee for Dean of the College of Science, 1989
- Self-Study Instructional Support Committee, 1988
- Search Committee for Director of Computer Science, 1986

HONORS, FELLOWSHIP GRANT, AND SCHOLARSHIP

- Certificate of Successful Grantsmanship and Winning Grant Awards, 2003, 2004, and 2005
- NASA Faculty Fellowship Program (NFFP), Stennis Space Center, 2003.
- NASA Faculty Fellowship Program (NFFP), Stennis Space Center, 2002
- One Hundred Black Men of American, Ph.D. Fellowship, 1997 – 1998
- National Aeronautic and Space Administration (NASA), Fellowship of Minority Woman in Science and Engineering, 1996 – 1997
- United Negro College Fund and The National Consortium for Education Access, Faculty Development, 1995 – 1996
- University of Houston, scholarship, 1995 - 1996

INDUSTRY EXPERIENCE

1983-1985 System Programmer II, Department of Technology, Houston Independent School District, Texas

1975-1980 Software Engineer, Computer Center, Shanghai Pharmaceutical Industry Design Institution, Shanghai, China

MEMBERSHIPS

- Member of ACM (Association for Information System)
- Member of IEEE Computer Society
- Member of Decision Science Society
- Member of EDSIG, the AITP Special Interest Group for Educators

COMMUNITY RELATIONS

- Member of AARP
- Participate in Louisiana Vision 2020
- Coordinator (volunteer) for Asian Executive MBA Program, Tulane University
- Sponsor for University Scholars Day & CIS Club
- Master teacher of Project Alert/Training and Treatment program
- Sponsor for students' activities, high school partnership