

## CURRICULUM VITA

### Ming-Shan Su

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### EDUCATION

2002	Ph.D.	Computer Science	University of Oklahoma - OU, Norman, OK
1995	M.S.	Computer Science	University of Oklahoma - OU, Norman, OK
1992	B.S.	General Study	University of Central Oklahoma - UCO, Edmond, OK
1982	A.A.	Marine Engineering	Taipei College Marine Technology, Taipei, Taiwan (formally known as China Junior College of Marine Technology, Taipei, Taiwan)

### ACADEMIC AND RELATED NON-ACADEMIC EXPERIENCE

08/12 – Present	Professor, Department of Chemistry, Computer, and Physical Sciences, Southeastern Oklahoma State University (SE)
08/07 – 07/12	Associate Professor, Department of Chemistry, Computer, and Physical Sciences, Southeastern Oklahoma State University (SE)
08/02 – 07/07	Assistant Professor, Department of Chemistry, Computer, and Physical Sciences, Southeastern Oklahoma State University (SE)
01/02 – 07/02	Postdoctoral Fellow, School of Computer Science, University of Oklahoma (I finished my Ph.D. work on 01/18/02)
08/99 – 04/00	Graduate Assistant <ul style="list-style-type: none"><li>• ISCAS 99 Database Manager &amp; Advance Technical Program Designer</li><li>• ISCAS 99 - Conference Technical Program Management Project (as in the attachments):<ul style="list-style-type: none"><li>➤ Design a Database to store the information of 1,300 technical papers</li><li>➤ Design the format and content of the Advance Program Booklet</li><li>➤ Design a <u>Technical Program Management Software</u> for 1,300 papers with 3,500 authors</li><li>➤ Publish the On-Line Advance Program over the <a href="http://www.cs.ou.edu/iscas99">http://www.cs.ou.edu/iscas99</a> website</li><li>➤ Implement the TPMS to produce the Advance and Final Program Booklets</li></ul></li></ul>
01/98 – 01/99	Graduate Assistant, Lucent Application Programmer <ul style="list-style-type: none"><li>• Lucent Web-based Warehouse Parts On-Line Prediction Project:</li></ul>
08/97 – 12/97	Teaching Assistant <ul style="list-style-type: none"><li>• Assist the instructor to teach the Operating Systems and Data Networks courses in the School of Computer Science at OU.</li></ul>
08/96 – 05/97	Graduate Assistant – System Administrator <ul style="list-style-type: none"><li>• Manage the Computer Laboratory for the School of Communication at OU</li></ul>
02/94 – 05/96	Graduate Assistant – IBM Mainframe Application Programmer <ul style="list-style-type: none"><li>• Maintain and Update the report programs for main library staff at OU</li></ul>

05/85 – 08/89 (Sales Engineer - Swire Trading Ltd., Taipei, Taiwan)

- Responsible for the Marketing and Technical support for marine engines to yacht and fishing boat manufacturers

### **PROFESSIONAL INTERESTS**

Research in the area of Distributed Systems, Telecommunication Networks, and Software Engineering Technologies (e.g., Mobile/Ad-Hoc Networks and Distributed Network Fault Management)

### **SELECTED COMMITTEES AND SPECIAL ASSIGNMENTS**

#### ***University***

2004-Present	Member, Oklahoma Faculty Transfer Curriculum Committee, Computer Science Discipline for the Course Equivalency Project
2008-Present	Member, President's Council on Diversity Committee in the area of Web Technology and Images subcommittee
2008-Present	Member, Curricula Content for high school students
2010-2011	Chair, Promotion and Tenure Committee of Dr. Lie Qian
2012-2013	Member, Promotion and Tenure Committee of Dr. Hal Poovey

#### ***Community***

2004-Present	Member, the BCM (Baptist Collegiate Ministry) at SE
2006-Present	Member, Computer Science Advisory Committee, Grayson Community College, Texas

### **AWARDS AND HONORS**

2009-2010	Faculty Senate Recognition Award – for Excellence in Service (the Free Computer Clinic Service) from the School of Arts and Sciences
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### **PROFESSIONAL MEMBERSHIPS**

Current Memberships:	None.
Former member:	IEEE (Institute of Electrical and Electronics Engineers) society IACIS(International Association for Computer Information Systems, 2010-2011)

### **EFFECTIVE TEACHING**

#### ***Major Curriculum Development Initiated***

- Major Computer Science Program updates (2007)

#### ***New Course Initiated***

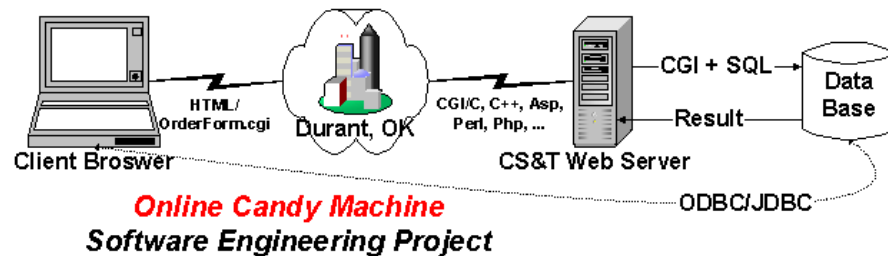
- CS5970 Distributed Networks (Fall 2002)

- The purpose of this course is to learn the general concepts of distributed network computing and to realize how those concepts have been applied in computer network technologies. Also, the advantages and disadvantages of those technologies will be discussed.
- CS 4970 Unix Networking and Programming (Summer 2004)
  - now CIS 4343 Applied Net-Centric Computing (Spring 2005)
  - The purpose of this course is to apply the knowledge of Computer Networking to meet the network needs of your organization by integrating the Windows operating systems, Linux operating system, wired/wireless routers, network printer servers, and various network services/servers.
- CS 4970 Web Applications using ASP.NET (Summer 2005)
  - now CS 4623 Advanced Web-based Applications: Using ASP.NET (Spring 2006)
  - This course teaches students how to build advanced and customized Web sites from the ground up. Topics include: understanding ASP.NET and the .NET architecture, building Web applications using rapid application development techniques, developing Web forms with server controls, displaying dynamic data from a database using ADO.NET, creating Web services, and deploying Web applications. In addition, HTTP, XML, SOAP, and WSDL will be introduced if time permits

### ***Teaching Innovations***

- CIS/CS 4423 Software Engineering, Spring 2003, 2004, 2005, 2006  
For this course, I have set up an Internet World Wide Web Client-Server environment under the Linux platform which is a networking system totally different from SE's Windows system, so each student will have his/her own personal website and different real world hands-on experiences on Operating Systems and Networking platforms. In addition, based on the new system students create their "On-line Shopping Candy Machine" (similar to Amazon.com or E-Bay) E-Commerce application. Under that environment, students can generate dynamic web pages on their own web sites, write CGI (Common Gateway Interface) networking programs, and interact with the Database server to produce a prototype "E-Commerce On-Line Shopping Software" (as shown in the figure below or test them at <http://www.SE.edu/faculty/msu/se.html>).

Online Candy Machines is one of the Online Shopping Cart Projects assigned in the Software Engineering course:



### ***Courses Taught***

CIS 1003 - Computers in Society  
CIS 3223 - Net-Centric Computing  
CIS 4343 - Applied Net-Centric Computing  
CS 1613 - Computer Science – I  
CS 1623 - Computer Science – II  
CS 2510 - Seminar in Programming  
CS 2813 - Data Structures  
CS 4113 - Operating Systems  
CS 4223 - Algorithm Analysis  
CS 4314 - Compiler Construction  
CS 4423 - Software Engineering  
CS 4623 - Advanced Web-based Application Development  
CS 5103 - Foundations of Computer Science  
CS 5973 - Distributed Networks  
CS 5990 - Research Maters Thesis

### **PUBLICATIONS**

Thulasiraman, K., Su, M.-S. (2012, May). Diagnosis in a Network of Processors: Centralized and Distributed Models and Algorithms, *the proceedings of NCTCSDM 2012 which was published as a special issue of JCMCC*.

Phelps, D., Su, M.-S., and Thulasiraman, K., Distributed Testing and Diagnosis in a Mobile Ad-Hoc Environment, *Journal of Network and Computer Applications*, under the review process.

Tiger, A., Su, M.-S., Hicks, J., (2010, Oct 6). Using Discrete Event Simulation to Evaluate the Benefits of RFID in Reducing Traffic Congestion and Pollution While Increasing Student Safety in Rural Oklahoma Schools, *International Association for Computer Information Systems (IACIS 2010) conference and was nominated for the best technical paper*

Phelps, D., Su, M.-S., and Thulasiraman, K., (2010, June 28). Distributed Testing and Diagnosis in a Mobile Computing Environment, *International Wireless Communications & Mobile Computing Conference (IWCMC 2010)*

Tiger, A., Su, M.-S., Fogle, C., (2006 Oct.). A New Trend in Teaching to Meet AACSB Mandates: Integrating Computer Information Systems and Management Science by Using Microsoft's .NET And LINDO API, *International Association for Computer Information Systems (IACIS 2006)*

Thulasiraman, K., Su, M.-S., Goel, V., (2003, May). Multi-Level Distributed Fault Detection in Computer Networks, *IEEE International Symposium on Circuits and Systems (ISCAS 2003)*

Su, M.-S., Thulasiraman, K., Das, A., (2002 Nov.). A Scalable On-Line and Multi-Level Distributed Fault Detection/Monitoring System based on the SNMP Protocol, *IEEE Global Telecommunications Conference (GLOBECOM'02)*

Su, M.-S. (2002 Jan.) , *Multilevel Distributed Diagnosis and the Design of a Distributed Network Fault Detection System Based on the SNMP Protocol*, Ph.D. Dissertation, School of Computer Science, University of Oklahoma

Su, M.-S., Thulasiraman, K., Das, A., (2001 Oct.). A Multi-Level Adaptive Distributed Diagnosis Algorithm for Fault Detection in a Network of Processors, *Proc. 39th Annual Allerton Conf. on Communication, Control, and Computers*

## **OTHER PROFESSIONAL ACTIVITIES**

### **RESEARCH GUIDENCE**

Master's Thesis Mentor

Danny Phelps, "Distributed Testing and Diagnosis in a Mobile Computing Environment", School of Art and Sciences, Southeastern Oklahoma State University, Durant, Oklahoma, Sept. 2006,USA

### **Poster Presentations on Oklahoma Research Day**

- 2014 Ryan Summit and Ming-Shan Su, "Implement the PaaS (Platform as a Service) on Windows Azure Cloud and Deploy a PHP-MySQL Cloud-based Online Registration Web Application Using FTP" *Oklahoma Research Day 2014, Edmond, Oklahoma*
- 2010 Justin Davis and Ming-Shan Su, "An Implementation Of the Asynchronous Decentralized Leader Election Algorithm In a Ring Network", *Oklahoma Research Day 2010, Lawton, Oklahoma*
- 2010 Aaron Hamilton and Ming-Shan Su, "An Implementation Of a Real-time Streaming Video Server and Client", *Oklahoma Research Day 2010, Lawton, Oklahoma*
- 2009 Daniel Phelps and Ming-Shan Su, "Distributed Testing and Diagnosis in a Mobile Ad-Hoc Wireless Network", *Oklahoma Research Day 2009, Broken Arrow, Oklahoma*
- 2008 Aaron Hamilton and Ming-Shan Su, "An Online E-Grocery Store", *Oklahoma Research Day 2008, Broken Arrow, Oklahoma*
- 2008 Aaron Hamilton and Ming-Shan Su, "A Real-Time Internet Tic-Tac-Toe Game", *Oklahoma Research Day 2008, Broken Arrow, Oklahoma*
- 2005 David Kobosky and Ming-Shan Su, "A Simplified Windows Explorer Using Visual Basic.NET", *Oklahoma Research Day 2005, Edmond, Oklahoma*

- 2005 Daniel Phelps and Ming-Shan Su, “An Online Animated Teaching Tool for Floye-Warshall’s All-Pairs Shortest Paths Algorithm”, *Oklahoma Research Day 2005*, Edmond, Oklahoma
- 2005 Daniel Phelps and Ming-Shan Su, “An Online Animated Towers of Hanoi Program: A Simplified Game Using JAVA Applet”, *Oklahoma Research Day 2005*, Edmond, Oklahoma
- 2004 Keith Robinson, Larry McKeivitt, and Ming-Shan Su, “Toddy Bear Online Library System – A Three-tier Database-Driven Architecture Integrating LAMP Technologies”, *Oklahoma Research Day 2004*, Edmond, Oklahoma  
Keith Robinson’s presentation was awarded for Outstanding Student Poster (S-308)
- 2003 Kevin Roark, Stephan Terrill, Taron Graves, William Raines, and Ming-Shan Su, “MORETHAN8BUCKSBACK.COM – An On-Line Buy-Sell-Buy WWW System To Maximize College Textbook Value”, *Oklahoma Research Day 2003*, Edmond, Oklahoma

### **RESEARCH COLLABORATION**

- 2002-Present K. Thulasiraman, University of Oklahoma, Norman, Oklahoma  
2002-2010 Andrew Tiger, Southeastern Oklahoma State University, Durant, Oklahoma

### **GRANTS and CONTRACTS**

- Sept./2013 Microsoft’s Windows Azure Educator Grant, \$ 44,400 (Awarded)  
Spring/2011 Southeastern Organized Research Fund, \$1575.00 (Funded: \$1275+300)  
Fall/2010 Southeastern Organized Research Fund, \$1394.75 (Funded)  
Fall/2006 Southeastern Organized Research Fund, \$609.25 (Funded)

### **PROFESSIONAL SERVICE**

- 8/2011 Program Committee Chair - the 13th IEEE Joint International Computer Science and Information Technology Conference  
8/2011 Program Committee Chair - the 6th IEEE Joint International Information Technology and Artificial Intelligence Conference  
6/2010 Session Chair - Energy Awareness and Scheduling in WiMAX Networks (Broadband Symposium) session and Performance Modeling and Analysis & Upper Layer Design session (Mobile Computing Symposium), the 6<sup>th</sup> Internal Wireless Communications & Mobile Computing  
7/2009-12/2011 Founder and Member - Free Computer Clinic Service  
6/2009-Present IT Field Trip initiator/organizer, organizing the annual trip to tour to the IT department and computer servers of the Choctaw Casino at Durant  
7/2008 Website Designer, Built advanced web sites for different local organizations (e.g., Wishing-Well Org., Adult-7 Sunday School of FBC church, etc.) in Durant for free

Spring/2004 Internship program initiator, with Choctaw Casino  
Spring/2004 Consultant, the Criminal History Database of the Madill Policy Department,  
Oklahoma  
Fall/2003 Coach, the SE programming team for the ACM Regional Programming Contest  
Spring/2003 Internship program initiator, with Customer Linx (A large high tech firm in  
Durant)

### **OTHER ACTIVITIES/SERVICES**

3/2011-Present Member and Speaker of the Chinese Worship Service in Durant  
2002-Present Host for the SE Chinese Student Fellowship  
2002-Present Interpreter for the local Chinese in Durant  
2001-2002 Mission Dept. Co-Worker at Chinese Baptist Church, Norman, OK  
1997-1998 Graduate Senator for the School of Computer Science, University of  
Oklahoma  
Fall/1994 Chinese Student Association Sports Team Leader, University of Oklahoma