

Bradford C. Armitage

1915 Yorkshire Ave. S. Minnetonka, MN 55305
952-426-2298
barmitage@digitalriver.com

Summary:

Over 25 years of industry experience with emphasis on ORACLE software and relational database management. Strong skills in UNIX administration and systems analysis. A MBA degree in Accounting and an undergraduate degree in MIS. Applications experience in Accounting, Manufacturing and Order Entry. Experience teaching Java programming, System Design, and Relational Database Theory at Metro-State University.

Hardware, Software & Systems:

- Hardware: HP-9000, AIX, SUN, PC's, IBM 4381, IBM 9370, IBM 3090, IBM 34 & 36
- Operating Systems: UNIX (HP, AIX, SUN), LINUX, Windows, NT, MVS, VSE/ESA
- Databases: Oracle, SQL Server, MySQL, Informix, ADABAS, DL1
- Applications: E-Commerce, Financials, Manufacturing, Order Entry, and Document Imaging
- Languages: JAVA, SQL, PL*SQL, COBOL, Natural, "C", RPG II

Experience:

Digital River – Eden Prairie MN. May-2008 to Present

Senior DBA

- Responsible for daily support of E-Commerce Oracle database platform (tuning, upgrades, backups, and data replication).
- Oracle versions 9, 10 and 11.
- Backup support on SQL Server and MySQL.
- Installed, upgraded and configured Shareplex (replication software).
- Working on installing and configuring RAC for E-Commerce platform.

Merrill Corporation – St. Paul MN. Jan-2001 to May-2008

DBA Manager

- Managed daily operations and task of the Data Base Administration group.
- Help in planning the yearly budget for the Data Base group.
- Was responsible for installation, upgrade and maintenance of all Oracle software including: 9 production, 9 staging/testing, and 10 development Oracle databases, 11i Oracle Financial package, OFA OLAP Data Warehouse and various backup interfaces and tuning software.
- Managed and lead project to upgrade 11i system from 11.5.4 to 11.5.9.
- Oracle Technical lead on installation of 11i modules: AP, WF, AR, Billing, FA, GL, PO, PA, and Internet Procurement.
- Installed Oracle versions 8.1.6, 8.1.7, 9.0.1, 9.2.0, and 10g. Upgraded Oracle versions 8 to 9.0.1 , 9.2.0 and 10g.
- Performed constant tuning and monitoring of Oracle instances for optimal performance. Setup and used Toad , OEM Tuning Pack and Statspack for monitoring and tuning tools.
- Wrote and maintained UNIX scripts needed for support of the Oracle environment.
- Responsible for all backup and recovery of Oracle software and databases.
- Responsible for Oracle OFA software: setup and maintenance.
- Set up Apache/Tomcat for Lawson Portal software.
- Installed and configured RMan with Netbackup.
- UNIX HP Administrator backup.

- Responsible for installs, upgrades and troubleshooting of the SQL Server database in use at Merrill Corporation.

Metro State University – St. Paul MN. Aug-1999 to present

Instructor

- Teaching programming fundamentals and system design using the JAVA language, in addition to Relational Database theory.

Midwave – 6 months Eden Prairie MN. May-2000

Consultant

Cotelligent – 2.5 years Eden Prairie MN. Feb-1998 to June 2000

Consultant

Eaton – 5 years total Eden Prairie MN. Sept-1997 to Feb-1998 and May-1992 to Sept-1996

Oracle DBA

Talent Software – 11 months St. Louis Park MN. Oct-1996 to Aug-1997

Consultant

Moore Data Management Services – 4 years St. Louis Park MN. May-1988 to May-1992

Data Base Analyst

Farm Credit Services – 2.5 years St. Paul MN. Dec-1985 to May-1988

DBA & Systems Analyst

EDS – 1 year Lansing MI. Dec-1984 to Dec-1985

Systems Analyst

American Family Insurance – 1.5 years Madison WI. June-1982 to Dec-1984

Programmer Analyst

Menards – 2 years Eau Claire WI. May-1980 to May-1982

Programmer

Education:

- University of Minnesota – MBA Accounting: 1989
- UW – Eau Claire – BBA MIS and Computer Science: 1983
- Oracle Master Certification: 1995
- CDP certification: 1984

References:

- Available upon request

Brahma Dathan

Department of Information and Computer Sciences
Metropolitan State University
St. Paul, MN 55106
(651) 793-1475

Teaching Interests Introductory programming, programming languages (C, C++, Java, Visual Basic), computer literacy, operating systems, database systems, internet services, data structures, digital logic and computer architecture, systems programming, client-server computing, distributed systems, object-oriented design and programming, and computer networks.

Teaching Experience in Universities Have 15 years of experience teaching at the graduate and undergraduate levels at well-established computer science departments. Courses taught include: Introductory programming, data structures, digital logic, computer literacy courses, computer architecture, operating systems, database systems, systems programming, distributed systems, object-oriented software development, programming languages (C, C++, Java), comparative programming languages, and computer networks.

Part of the above experience has been teaching non-traditional students, some of them working toward a second degree and/or seeking a career change.

Related Employment

2000 – date	Information and Computer Sciences	Metropolitan State University Minneapolis, Minnesota
1994 – 2000	Department of Computer Science	St. Cloud State University St. Cloud, Minnesota
1989 – 1994	Department of Computer Science	University of Wyoming Laramie, Wyoming

Administrative Experience

Chair, Department of Information and Computer Sciences, since Fall 2008

Director, Graduate Program in Computer Science, since Spring 2004

Other Teaching Experience

A three-part sequence on Java technology for the College of Continuing Education at St. Cloud State University.

Taught a course on Visual Basic at Bankers Systems in St. Cloud, Minnesota.

Taught Systems Analysis and Design as an adjunct instructor at NEI Institute, Columbia Heights, Minnesota.

Education

Ph.D.	Computer Science	1989	University of Pittsburgh
M.S.	Computer Science	1987	University of Pittsburgh
M.Tech.	Computer Science	1979	Indian Institute of Technology
B.Sc. (Engg.)	Electronics and Comm.Engg.	1976	University of Kerala, India

Certifications

Sun Java 1.2 Certified Programmer (Certified in 2000).

Awards

Was awarded the Andrew Mellon pre-doctoral fellowship at the University of Pittsburgh.

Refereed Research Publications

1. (with S. Venkatesan) On finding strongly-connected components in distributed systems. Proceedings of the 26th Allerton Conference on Communication, Control, and Computing, September 1988.
2. (with J.P. Kearns) Immediate ordered service in distributed systems. Proceedings of the 9th International Conference on Distributed Computing Systems, June 1989.
3. Data availability in replicated databases. Ph.D. Thesis, University of Pittsburgh, 1989.
4. (with K.V.S. Ramarao) On the management of long-living transactions. Journal of Systems and Software, Vol. 11(1), pages 45-52, January, 1990.
5. (with K.V.S. Ramarao) Divide and conquer for distributed mutual exclusion. Proceedings of the Second IEEE Symposium on Parallel and Distributed Processing, December 1990.
6. (with K.V.S. Ramarao) Achieving graceful performance in error-prone replicated databases. Distributed Computing, Vol. 4(3), pages 163-174, 1991.
7. (with S. Venkatesan) Testing and debugging distributed programs using global predicates. Proceedings of the 32nd Allerton Conference on Communication, Control, and Computing, September 1992.
8. (with K.V.S. Ramarao) On the design of replicated databases. Information Sciences, Vol. 65, pages 173-187, November 1992.
9. Concurrency control in N-version programmed database systems. Information Systems, Vol. 18(8), pages 539-557, 1993.
10. An algorithm for the implementation of replicated tables. Fourth International Conference on Foundations of Data Organization and Algorithms, Chicago, 1993.
11. On the implementation of replicated priority queues. International Symposium on Applied Computing, Monterrey, Mexico, 1993.

12. On the design of real-time database systems. International Conference on Reliability and Quality in Design, Seattle, Washington, March 16-18, 1994.
13. (with S. Venkatesan) Using global predicates for distributed testing and debugging. IEEE Transactions on Software Engineering, February 1995.
14. (with S. Ramnath) Managing very large databases. International Conference on Computers and Information, July 1996.
15. Recording global states in mobile computer systems. Proceedings of Eleventh International Conference on Systems Engineering, pages 37-42, 1996.
16. (with S. Ramnath) On rollback-free recovery in distributed systems. International Conference on Computers and Information, 1996.
17. Drawing Non-Intersecting Lines On A Raster Display. 17th International Conference on Computers and Their Applications, April 2002.
18. (with L. Gottschalk, S. Fitzgerald, J. Liu, and M. Stein) Computer forensics programs in higher education: a preliminary study, ACM SIGCSE, 2005
19. (with S. Ramnath) Evolving an integrated curriculum for object-oriented analysis and design, ACM SIGCSE Bulletin, v.40 n.1, March 2008
20. Checking for Liskov Substitution Principle Compliance in Java Programs, 18th International Conference on Software Engineering and Data Engineering (SEDE-2009), Las Vegas.

Book Publications:

(with S. Ramnath) Object Oriented Analysis, Design, and Implementation: An Integrated Approach, Universities Press, to be published in 2010.

Brian K Toren

Skills:

Project Management
Multimedia Presentations
Web Design Development
Web Support
Management Planning
Futures Forecasting and
Planning
Accounting
Distance Learning
Grandfather



Recent Experience:

Brian is presently on the Community Faculty at [Metropolitan State University](#).

Classes include:

- Understanding and Using the Internet (no longer teach this course)
- Introduction to Microcomputer Applications

Prior Experience

Brian presently consults with Fissure Corporation. He has led several workshops in project management. He recently created and published an online course on Managing Change. Brian also is Fissures bookkeeper.

Brian became an associate of Earl C. Joseph at Anticipatory Sciences Inc. (ASI) upon retirement from Unisys in 1990. As an associate he consulted with companies and assisted with midrange and long-range planning. Organizations with which ASI consulted include Methodist Hospital, the University of Wisconsin at Menominee and the Selby Community Development Corporation among others. Also as an associate, Brian helped Earl facilitate several workshops on organizational planning and gave many presentations nationwide on futures topics.

Prior to 1990 Brian worked for Sperry Corporation (now Unisys Corp.) for 34 years. The early years were spent as a programmer where he sized and wrote programs for several different computer systems including operation and control systems, simulators, assemblers and a browser . The last 24 years was spent in management. Management experiences included managing a Sperry Univac site at the Anti-ICBM Site at Kwajalein, Marshall Islands and the National Aviation FAA Experimentation Center (NAFEC) at Atlantic City, New Jersey. Brian managed several domestic and International proposal development projects for Sperry in the 70s and 80s. This included the sizing and schedule estimation for several software development projects that were part of the proposed work efforts. In 1983 Brian transferred into an organization at Sperry that developed and implemented telecommunications systems. Here he managed a team comprised of

individuals from the U.S. and Great Britain that performed test and evaluation of Sperry's implementation of the IBM SNA protocol in Sperry Front End Processors. During this period until his retirement from Unisys, Brian was a Group manager and a project manager for several projects that addressed the implementation of telecommunications equipment and services in the US, Canada and Australia. His final year at Sperry was as Chief Engineer for a project to design a custom telecommunications system for J.C. Penny.

Publications:

Brian has contributed columns for the Minnesota Futurist newsletter ³Future Trends.² He has written columns for the Minnesota Futurist quarterly journal ³Futurics,² and the Minnesota General Systems Chapter ³newsletter ³Systems Trends.² Brian has two articles published in the ³Macmillan Encyclopedia of the Future.² He created a multimedia interactive beginning reader for children 4 to 6 years old using Macromedia's Director 8

Education:

Brian has a Bachelor of Science in Business Administration degree from the University of Minnesota and post graduate studies. He is an alumnus of the Carlson School of Business Management.

Darlene Tester, Juris Doctorate
6066 240th Street E.
Elko, Minnesota 55020
Home: (952) 461-2658 Email: nonsequitr@earthlink.net
CISSP, CISM, CHSS,
ISO17799 Implementation & ITIL Foundation certifications

Summary

Results oriented, accomplished security and legal liability professional with progressive management experience in a variety of professional settings. Utilized skills to develop data security, privacy and PCI programs for several corporations. Effective in utilizing resources through team based leadership with key competencies in security program development and implementation, business continuation planning and development, technical team building and management, and identification of legal liability as it relates to the security programs in place. Minnesota attorney providing corporate legal liability advice with specialty in regulatory compliance of HIPAA, GLBA, and EU Directive/Safe Harbor.

Certifications/Licenses

CISSP (ISC2)
CISM (ISACA)
CHSS (HIPAAcademy)
ITIL Foundations
ISO17799 Implementer
ISO17799 Auditor
MN Attorney

Experience Overview

30 years experience in information security
25 years experience in business continuity and disaster recovery plan development
20 years experience in customer service/relationship management
20 years experience in project management
18 years experience in technical staff management
15 years Minnesota attorney
10 years experience in vendor management
10 years regulatory compliance experience

Professional Experience

2009 – Present: Data Privacy Manager , Fingerhut

- Lead company in development and implementation of a privacy program to meet PCI
- Establish disaster recovery and business continuity plans for all critical functions of the company
- Maintain PCI compliance measures and audit to ensure PCI can/is still being met
- Maintain a current database on privacy laws by state and country
- Assist in BSA/AML audit preparation
- Develop and implement security policies and procedures

2001 - 2009: Professional Contract Consultant

– Financial services client

- Led an audit review of a IM implementation to ensure legal liability and other issues had been identified and addressed
- Worked on BSA/AML audit
- Worked on security policies and procedures for client subsidiaries
- Managed an audit project for reviewing their disaster recovery plans as well as their user access management controls

– Ethanol plant client

- Led project on IT Governance for an ethanol plant client
- Reviewed IT contracts for enforceability and provided input on contract language

– Public sector client

- Worked on state government disaster recovery project
- Built a security assessment tool to assist them in determining threat and risk
- Worked with staff to review physical and logical security of Hennepin County Government Center
- Developed business impact analysis tool for interviews
- Interviewed staff in variety of agencies to determine impact of disaster at their sites
- Performed a physical security assessment of the Capitol Complex and drafted a report for improvements

– Large commercial auditing firm client

- Led audit project for large commercial auditing firm to review their DR plans and security policies and update to meet existing IT environment

– Hospitality client

- Compliance with internal security framework
- Development of security methodology for organization
- HIPAA, PCI, Safe Harbor, and GLBA compliance maintenance
- Fraud investigation

- Development of disaster recovery plans for internal and customer applications
- Development of crisis management team and implementation plan
- Coordination of disaster plans with international offices
- Development of pandemic plans for all domestic and international offices
- Manages 6 direct reports including a fraud investigator and a security manager

– Large healthcare client

- HIPAA compliance with plan sponsor and business associate clients
- HIPAA security compliance audits for small healthcare organizations
- BIA for large healthcare organization to meet JCAHO audit requirements
- Security tool analysis for identity management and other security measures
- Business continuity/disaster recovery development with large healthcare organization
- Disaster recovery assessments with state agency
- Business process assessments for healthcare insurance client
- Risk analysis tool development for disaster recovery assessments for state agencies
- Development of practice

– Educational institution clients

- Developed curriculum for computer security, computer forensics and computer law
- Taught classes in computer security and computer forensics at MSU
- Taught classes in Federal Indian Law at Hamline
- Development of degree program in computer forensics for MSU

– Mid-range credit union client

- Reviewed existing security policies and procedures
- Re-wrote or eliminated several policies
- Updated the policies to meet new technology
- Created a pandemic flu plan testing scenario
- Organized and moderated a tabletop test of their plan

– Mortgage lending company client

- HIPAA privacy compliance initiative
- Developed and implemented a security program for the business line
- Established parameters for EU/Safe Harbor compliance and entrance
- Performed security tool analysis for identity management and email encryption
- Developed security assessment tools for vendor security assessments
- Developed and implemented a security awareness program
- Developed a security website on the intranet
- Drafted a test scenario for the first BCP/DR system test for the organization
- Developed security roadmaps for European offices to meet EU Directive and European banking requirements

- Developed and implemented physical security requirements for standard facilities security

– Large hospital and clinic client

- HIPAA privacy compliance initiative
- Drafted BIA's and interviewed staff
- Drafted results of BIA and established project plan for business continuity development
- Drafted a test scenario for the first BCP/DR system test for the organization
- Trained internal staff to take over project
- Developed and implemented physical security requirements for standard facilities security

– Healthcare benefits processing client

- Audited their physical, technical and administrative policies and procedure for HIPAA compliance
- Interviewed staff to determine level of practical implementation
- Drafted a report with recommendations for changes and enhancements

– Large Midwestern medical research foundation client

- Assisted application developers in establishing field, view and table security access policies
- Performed security tool analyses on products for identity management, access control and email encryption
- Developed compliance survey to assess gap between implemented security/privacy measures and required measures for HIPAA
- Developed privacy policy for websites to meet HIPAA compliance
- Established a plan for them to meet URAC and Bobbie website standards
- Perform physical security assessments of facilities and campus grounds

1998 – 2001: Chief Security Officer – Espiria

- Developed organizational IT and training plans for a reorganized startup company that increased the staff size 50% in 12 months.
- Acted as in-house counsel for contract negotiations, drafted documentation regarding the securing of the IT environment.
- Developed and led a team of 15 security experts who successfully crossed platforms and protocols.
- Managed 65 of the 70 people in the company by 2000 as direct reports – including sales, marketing, engineering and security staff
- Developed the sales and marketing model to sell the security services for the security consulting company that resulted in 25 % increased sales
- Consulted with state agencies regarding their HIPAA security and privacy issues.
- Participated in a dual presentation with Halleland, Lewis, Nilan, Sipkins & Johnson law firm discussing HIPAA regulations at healthcare provider clients.

- Developed a security rating process to rate clients on level of security. Success of program has led to the company seeking copyright protection.
- Assigned as company spokesperson speaking at national conferences, client conferences, and user groups on legal liability in the e-commerce age.
- Developed and delivered presentations on HIPAA and GLBA compliance and legal liability for failure to comply.
- Developed project plan for HIPAA and GLBA security program development and implementation for clients.
- Drafted white paper on HIPAA security measures and strong security programs for presentation at Detroit conference.
- Drafted white papers on security department development, best practices of the industry and using security to meet regulatory and statutory requirements.
- Drafted an expansion plan for potential investors with the expected outcome of five additional offices throughout the country over a 12-18 month time period.

1996 – 1998

Norwest Bank, Minneapolis, MN.

Vice President, Data Security Planning & Architecture

- Developed and led a team of security experts who developed and maintained the architecture of the financial services network
- Supervised 5 management staff in 5 states; those managers each had 15-20 people on staff. I also managed the architects and security consultants within the HQ campus. All staff reported to me and I was responsible for over 100 performance reviews.
- Only attorney outside of the Legal Dept. allowed to render opinions for the 7th largest bank in the US
- Represented 7th largest bank in BITS and ABA work groups on security and legal liability
- Developed encryption policy and standard vendor requirements for all computer-related contracts
- Established corporate standards for computer use and vendor access
- Drafted and published corporate handbooks on data security
- Developed and initiated a risk analysis for both corporate and data processing plans
- Drafted corporate-level contingency plan
- Adept in smart card technology, biometrics and PKI solutions.
- Acted in the capacity of Data Security Officer for the financial institution and all of its subsidiaries

Education:

- BSI 7799 Standard Implementation Qualified (May 2004)
- CISM certification (May 2004)
- Certified HIPAA Security Specialist exam (April 2003)

- William Mitchell College of Law -- JD (June 1994)/ Bar admitted 1995 (Federal admission December, 1995)
- Inver Hill Community College -- AA in Criminal Justice
- Gustavus Adolphus College -- BA Education/History
- Mechanic Arts High School -- Valedictorian
- Variety of coursework in Family Law, Criminal Law, ADR, Criminal Appeals; Employment Law, Computer/Internet Law, Intellectual Property Law
- Coursework on HIPAA compliance, Gramm-Leach-Bliley compliance, Privacy, Safe Harbor certification, e-Business Law and Internet Business
- Published: Building A Sound Security Program, ISBN: 1-4116-2553-6

Professional Affiliations:

- Minnesota State Bar Association
- Minnesota American Indian Bar Association
- American Bar Association
- Association of Contingency Planners
- Information Systems Security Association
- ISACA – CISM
- Member ISC² – CISSP
- American Society for Industrial Security

In addition, I was twice published in *Security Management* magazine for articles dealing with password security and non-public domain software. One of these articles was re-published in a European publication. I have also had a published article in *Minnesota Bench and Bar* magazine dealing with cultural diversity and interviewing techniques. I have been featured in several articles in *Twin Cities Business Monthly* on security measures, managing IT on a shoestring budget, and protecting the privacy of clients on websites. *Twin Cities Business Journal* will feature me in one of their November issues discussing the role of Chief Security Officers in corporations today. I'm also a national speaker on security and legal liability having spoken most recently at the MN State IT Symposium and the ITEC Conference in December of 2008 (my eighth year speaking there). I was a speaker at the CSI NetSec Conference in June 2004 in San Francisco and at their November Conference in Washington, DC. I spoke in May of 2006 on pandemic planning at a local conference, and have published a book on building information security programs in September 2006.

References Upon Request

David L. Valentine

1713 Dixon Drive
Saint Paul Park, MN 55071

H(651)-330-9086
dkvalz@comcast.net

An accomplished application architect specializing in Object Oriented Web Architecture with extensive experience in the full life cycle of the software engineering process, including requirements definition, design, proof of concept, prototyping, development, interface implementation, testing, and maintenance.

Summary of Qualifications:

- ◆ Experience using ASP, ASP.NET, PHP, Java, XHTML, CSS, XML, and JavaScript.
- ◆ Knowledgeable in SQL and Database Management.
- ◆ Experience with SQL Server, Oracle, MySQL, Fox Pro and Access Databases.
- ◆ Extensive Programming knowledge in Visual Basic, C, C++, Pascal, and PLSQL.
- ◆ Experience working with Windows 3.x, 9x, NT, 2K, XP, UNIX, DOS, and Linux.

Technical experience:

Languages: ASP.NET, C#, Java, Visual Basic, XHTML, Pascal, PHP, Silverlight, AJAX
Databases: SQL Server, Oracle, MySQL, Access, Fox Pro
Software: Visual Studio, SharePoint, Enterprise Manager, SSIS, Borland JBuilder, TextPad, ClearQuest, Oracle, Microsoft Office applications
OS: Microsoft Window (95, 98, NT, 2000, XP, 2003, Vista, 7), Linux, Unix
Hardware: PC's, Servers, Networking Switches and Hubs, Firewalls, RAID Disk Arrays, SAN Storage

Professional Experience

Ceridian Corporation, Bloomington MN

Application Architect

2/2004-Present

Manage application development processes and resources to ensure the reduction of implementations time for new customers while improving the quality and experience for a new customer. Design and assist in development of cost saving tools, to drive down customer costs, while increasing company profits.

- ◆ Provide architecture artifacts for an implementation web tool, which ensures a quality implementation and reduces overall Implementation cycle time by 30%.
- ◆ Built an activity based costing tool, which monitors resource utilization and provides metrics for bottlenecks in a process.
- ◆ Administer SharePoint web development and design. Built an external facing customer tool external users can security access their documentation stored on an Internal SharePoint Server utilizing SharePoint Web Services technology.
- ◆ Developed a reporting application based on Microsoft Word 2003's WordML, which the templates are developed with Microsoft's Smart Tag functionality

Metropolitan State University 5/2002-Present

Adjunct Faculty

- ◆ Instruct the client and server side web development courses.
- ◆ Set up user accounts on Sun Solaris, and Windows NT 4 Servers.
- ◆ Core Lectures Include: XHTML, CSS, JavaScript, PHP, ASP, MySQL, and XML
- ◆ Minor Lectures Include: Software Engineering, Software Development and Design, Encryption, Flash, and secure transactions.

IQ Ventures, LLC. 5/2003-2/2004

Software Developer

- ◆ Develop IQ Point of Sale Restaurant System using VB.NET
- ◆ Develop Internet Interfaces for Web Access to Data using ASP.NET
- ◆ Develop testing strategies for new system releases
- ◆ Documented all existing products and new products.

Nath Companies, Inc. 8/2000-5/2003

System Administrator

- ◆ Build Reporting/Business Applications using Visual Basic
- ◆ Develop Interactive Web Pages with ASP, IIS, JSP, Servlets, and Apache.
- ◆ Monitor and update SQL Server Databases.
- ◆ Manage and Support Denny's and Burger King's Networks and Back Office Servers.
- ◆ Maintain and monitor the Nath Windows 2000 network infrastructure
- ◆ Build and implement Windows 2000 workstations.
- ◆ Install and set up IIS, and SQL Server 2000.
- ◆ I have developed intranet application for helpdesk ticketing/information storage

Unisys 6/1999-8/2000

Remedy Developer/System Analyst

- ◆ Developed and implemented helpdesk software with Remedy.
- ◆ Developed Interactive Web Pages with ASP to access the Remedy AR Database.
- ◆ Developed and maintained a helpdesk and Remedy web pages.
- ◆ Provided hardware and software assistance on personal computer issues.
- ◆ Troubleshoot and resolved issues on 2200, A-series, Unix, and NT mainframes.
- ◆ Developed support web pages for new external clients acquired by Unisys.
- ◆ Maintained and developed C++ code to complement Remedy.

Advance Circuits Inc. 6/1992-4/1999

Project Manager

- ◆ Developed Visual Basic 5 Applications
- ◆ Managed Six Sigma Teams to ensure Quality within processes
- ◆ Developed Access applications for quality assurance.
- ◆ Managed a variety of projects in a production environment.
- ◆ Maintained quality and production flow in high production areas.
- ◆ Performed ISO 9002 internal audits.
- ◆ Certified as a technical trainer.

Education

Metropolitan State University, *Saint Paul, MN*

Bachelors of Science, COMPUTER SCIENCE 2002

Century College, *White Bear Lake, MN*

Microsoft Applications 1995

Academic/Work Achievements

- ◆ Quality Awards from Advance Circuits Inc.
- ◆ Award of Excellence in Process Characterization from Motorola.

References Available upon Request

Jeffrey K. Boleman, M.S.C.S.

926 Sunrise Avenue • Stillwater, MN 55082 • 612.208.5769 (cell) • jeff.boleman@gmail.com

Executive Summary

Computer Science and Forensics Instructor with Senior Unix Architect / Engineer experience, advanced education, large scale project based experience, and extensive technical knowledge looking for the challenging opportunity to combine his academic instructing and professional career.

- ✓ **Experience** – 14 years in large scale ITS project work including multi-platform systems management, databases, and middle-ware
- ✓ **Education and Management Training** – MS and BS in Computer Science, Mini-Master of IT
- ✓ **Project / Management Training** – Mini-MBA, ITIL Certified, PMBoK trained, U.S. Army PLDC, and U.S. Army BNCOC
- ✓ **Technical Skills** – Senior level knowledge in a wide variety of systems, platforms, tools, apps, and programming languages

Personal attributes which have contributed to my ability to execute and get the job done in past successes include the following:

- ✓ **Attitude** – Possessing the “it can be done” attitude while keeping the “big picture” in mind in regards to scalability and manageability
- ✓ **Open Communication Style** – Project/team members are constantly in the loop and well informed with shared information
- ✓ **Speaking Skills** – Instructor experience, presentations, and actively participating in structured decision making discussions
- ✓ **Personality** – Organized, knowledgeable, factual, system stabilizer, process establisher (Meyers Briggs test result was ESTJ)
- ✓ **Relationships** – Established, cohesive, and productive working relationships with different groups with diverse members

College Instructor Experience

Metropolitan State University (2007-Present) – A Minnesota State University in St. Paul

Community Faculty - Instruct Computer Forensics 264 Operating System Fundamentals II for Unix/Linux all Fall & Spring semesters

- Updated class and lab (with department head) which utilize VMware workstation, SUSE Linux, Sun Solaris, Perl, and Bash
- Received excellent evaluations from students who state they learned an exceptional amount and request me to teach more courses

Academy College (2006-2007) – A private college in Bloomington, MN

Faculty - Instructed Computer Science 3121 Linux/Unix and Computer Science 3018 TCP/IP Networking (part-time)

- Prepared students to take Linux+ and Network+ certifications utilizing Debian Linux, Sun Solaris, and Windows Server
- Organized lab, materials, and course development (updating) for all classes taught

Professional Experience

Lawson Software (2006-Present) – Global provider of enterprise software with 4500 customers in 40 countries based in St. Paul

Senior Unix Systems Administrator – Exceeded role while leading architecture decisions, budget savings, and technical projects

- Recognized for talent and commitment contributing to Lawson Software ITS FY 2009 goals
- Automated system management for large scale environments to reduce administrative overhead such as Services and R&D
- Designed and implemented cloud like AIX server snap-shot and image rebuilds for Services and R&D
- Architected and implemented the adoption of PowerVM for AIX virtualized & clustered servers to significantly reduce overall cost, lower admin overhead, and increase project efficiency including major server implementation/migration projects for Services and R&D

Andersen Corporation (1999-2006) – Parent company of Andersen Windows et al with 14,000 employees based in the Twin Cities

Systems Administrator III / WebSphere Administrator – Managed complex highly available Unix production systems and processes

- Led engineering and implementation of enterprise backup system and DR strategy to enable a drop in enterprise recovery point from 48 hours to 15 minutes and enterprise recovery time from 48 hours to 2 hours
- Developed web-based system management, asset, performance, and transaction reporting using TeamQuest, SQL, Apache, and Perl
- Trained and mentored lead operators as technical lead for Veritas NetBackup and HP OpenView for day-to-day operation
- Established ITIL based change control guidelines for version promotion of WebSphere and Operating System upgrades
- Led AIX adoption and engineering of successful data center migration following acquisition of large distribution chain
- Engineered and consulted platform solutions on AIX, HP-UX, Sequent Dynix/ptx, SCO, and Stratus VOS
- Managed established HP-UX (dominant) and Sequent Dynix/ptx (migrated to AIX and HP-UX) environments

Hire Technology (1998-1999) – IT consulting firm based in Minneapolis (acquired by Talus Group)

Staff Consultant – Provide large scale enterprise business continuity solutions to global service industry leader, Carlson Companies

- Automated detailed reporting and alerting for Legato Enterprise Backup solution for Unix using Perl and Legato APIs
- Identified and resolved network issues throughout enterprise

SPS Commerce (1997-1998) – Provider of EDI B2B outsourcing for companies such as IBM, Sears, & Wal-Mart based in St. Paul / Mpls

Systems Administrator / Engineer – Engineered, implemented, & managed 35 Solaris, SCO, Windows, & Linux servers for prod and dev

- Planned & implemented server infrastructure, databases, web servers, networks, & B2B communication for start up outsourcing division
- Developed file transfer automation and integration with a large variety of communication protocols, software, & network equipment

Snyder Drug Stores, Inc (1996-1997) – Distribution to 400 owned, franchised, and private pharmacies based in Minnetonka, MN

Unix Systems Support Specialist – Provided network and hardware support to 90 Pharmacy and Point of Sale Unix systems

- Installed, upgraded, configured, troubleshot, and supported hardware, Unix, Novell, peer-to-peer networks, and Windows
- Developed, evaluated, recommended, implemented, and documented new server hardware standards

Education and Management Training

- Master of Science in Computer Science, 3.77 GPA, Metropolitan State University, St. Paul, MN (2007)
- Bachelor of Science in Computer Science, 3.94 GPA, Metropolitan State University, St. Paul, MN (1999)
- USENIX LISA – Management track training for Large Installation Base System Administrator Conference (2007)
- IT Infrastructure Library (ITIL) Service Management Essentials and Certification #68705 (2006)
- Mini Master of Information Technology (seminar series), St. Thomas University, St. Paul, MN (2003)
- Mini MBA for Technical Professionals (seminar series), St. Thomas University, St. Paul, MN (2003)
- Project Management Body of Knowledge (PMBOK) Project Management Training (2002)
- Basic Non-Commissioned Officer Course (BNCO) and Primary Leadership Development Course (PLDC) (1995-1996)
- Minor requirements completed in Computer Science, Computer Engineering, and Math from University of Minnesota, Duluth (1989-92)

Technical Training

- IBM HACMP II: Clustering Admin & Prob Det. (2009)
- USENIX LISA - Large Install. Base Sys. Admin. (2007)
- IBM LPAR Virtualization Planning and Config (2007)
- IBM WebSphere Business Integrator Imp (2006)
- IBM MQ Workflow Web Dev (2006)
- IBM WebSphere Application Server (2006)
- IBM HACMP I: Clustering Planning & Impl. (2003)
- IBM AIX 5L Performance Tuning Course (2002)
- Perl CGI CBT (2001)
- IBM Dynix/ptx Performance Tuning (2000)
- Veritas Vision Conference (2000)
- Veritas NetBackup System Administration (1999)
- HP OpenView Administration (1999)
- Stratus VOS Systems Administration (1999)
- Oracle SQL & PL/SQL Development & Admin (1997)
- Microsoft SQL Server 6.5 Admin Video Course (1997)
- Windows NT 4.0 Server Admin Video Course (1996)
- Unix Systems Administration Video Course (1996)
- St. Paul Software EDI Software Dev & Admin (1996)
- Novell Certified Network Admin Coursework (1995)
- University of Minnesota, Duluth – Pascal, Fortran, C/C++, Intro to Unix for CS & EE Students (1989-92)

Technical Core Competencies

- Languages: Perl, ksh, bash, Expect, Java, C/C++, Embedded C, VHDL, Pascal, Fortran
- Web: PHP, Apache, LAMP, XAMPP, ASP, HTML, CGI/Perl, WebSphere, MQWF
- Databases: Oracle SQL and PL/SQL, MySQL, SQL Server, DB2, PHPadmin
- Virtualization & Clustering: PowerVM/APV, VMware, PowerHA/HACMP
- Platforms: AIX, HP-UX, Linux, Sun Solaris, Sequent Dynix/ptx, Stratus VOS, SCO, BSD, Windows
- Enterprise Management: cfengine, Nagios, Veritas NetBackup, TSM, OpenView, TeamQuest, Samba, NFS, NIS
- Storage: EMC Clariion/DMX/Symetrix/VTL, IBM Shark/DS4500/DS4800, STK tape/disk, HP EVA, XioTech

Military

United States Army Reserve (1991-1997) – 367th Engineer Battalion

Staff Sergeant / Squad Leader (E-6) – Instructor for engineering tasks & Squad Leader for team of 10 engineers & 2 Sergeant team leaders

- Awarded Army Accommodation Medal, Army Achievement Medal, and Company Soldier of the Year

Jennifer F. Grant

1550 Zarthan Ave S. Unit 508
St. Louis Park, MN 55416

jenniferfgrant@gmail.com
612-716-8128

Customer focused and results driven professional with extensive experience leading teams in mid-large scale projects including program creation/delivery, software process improvement, disaster recovery, data quality, complex infrastructure upgrades, security compliance, and software implementations.

Experience

Wells Fargo

2003-present

E-Business System Consultant

- Primary liaison and technical lead between 3 client areas and technical organization for planning, conducting, and directing the analysis of highly complex business problems solved with strategic eCommerce-based solutions.
 - Integration of multi-system development efforts replacing legacy systems and improving fulfillment processing & reporting while managing rate rally surges and rapid stress/performance effects.
 - Security overhaul of image viewing system increasing granularity of access restrictions, reporting and scaling for over 50% organic growth.
- Project manager for large and complex projects, including development of project plans, schedules & budgets.
 - Successful completion of web server, application server (Websphere/Linux) and (Oracle, SQL Server, Web Intelligence/Business objects) database upgrades for multiple client server and web applications, including disaster recovery testing, resulting in organizational cost savings and improved efficiency.
- Internal consultant within technology and business groups by evaluating current processes and recommending new e-commerce solutions that reduce costs and extend current capabilities.
 - Principal group representative leading all web accessibility & compliance efforts for over 20 applications. Developed and implemented a year long program with business partners and technology team to improve web accessibility level.

Project Manager

- Selected for an intensive **6-month Leadership Development Program in Project Management** completed in 2005.
- Management of development and vendor staff, project schedule, implementation and budgeting of multiple projects including:
 - Successful delivery on-time & within budget of a high profile database migration and application enhancement effort abandoned by 3 previous project managers requiring overcoming low team morale and working with British vendor.
 - Integrating and implementing a foreign currency remittance system with multiple South and Central American banking institutions.

Web Developer

- Principal technical lead on a client server fulfillment processing system with over 10,000 users nationwide and multiple vendor systems processing over 3000 loans per day.
- Triage and resolve technical issues, communicate with customers and leadership team.

Community Faculty, Metropolitan State University

2004-present

- **Instruct ICS 100 Introduction to Technology Concepts in the Department of Information and Computer Sciences** (classroom and online formats)

- Faculty development: Teaching Online 2009, Online Course Development 2009, Diversity in Classroom 2008; Social Class 2008

Senior Business Analyst, Target Corporation 2003

- Extensive database mapping, business requirements definition, client relationship management and leadership of the entire testing effort of a Customer Relationship Management reporting tool on a data warehouse platform.

Object Partners, Inc. 2000-2003

Quality Assurance Director, H.B.Fuller

- Strategic planning and development of a full RUP-based software engineering methodology for a manufacturing client expanding the practice to manage 18 projects and adding 2 new positions while reducing software defects and introducing software tools, providing significant cost savings and higher customer satisfaction.
- Managed quality efforts for client with 100% on-time/on-budget completion of six successful product deliveries that included three iterations of product delivery and three product customizations.

Data Systems Analyst, University of Saint Thomas

- Analysis and management of a data integrity and business process review project at St. Thomas University including effective sponsor communication, system recommendations, risk mitigation and managing client expectations.

Java Software Engineer, University of Minnesota 1999-2000

- Database design, requirements management, team communication, system architecture, development and building a strong client relationship for a multi-media application.

Senior Software Engineer & Technical Trainer, West Group 1997-1999

- Design and development of a large sales force automation application and order purchasing system.
- Course design and instruction (C++ and Visual Basic).

Education

Ph.D. Business Administration with specialization in Industrial and Organizational Psychology, Northcentral University, 2010 (expected)

M.S. Software Engineering. University of Minnesota, 2001

B.A. Cum Laude, Mathematics & Computer Science. St. Olaf College, 1997

Professional Leadership

- **Technology & Diversity Mentor**, University of Minn., Wells Fargo & BestPrep 2002-2008
- Career and Development Instructor, Women Venture 2006-2007
- **PMI Community Coaching Program Volunteer** 2002-2005
 - Teach Project Management courses and coach on 6-month projects
- **Vice President, Board of Directors** for Pointe West Commons 2001-2002

Awards & Certifications

- **Wells Fargo Team Performance Award** 2008, 2009
- Wellness Coach Program, Wellcoach 2007
- **Wells Fargo Employee Award** 2006
- Diversity Facilitator Certification 2004
- **Leadership in Organizational Change Award**, HB Fuller 2001
- Fitness and Strength Training Instructor, CPR 1998-present

JIGANG LIU

3294 Richmond Alcove
Woodbury, MN 55129
E-mail: jigang.liu@metrostate.edu

Home: (651) 714-9685
Office: (651) 793-1472
Fax : (651) 793-1246

Education

- Ph. D. in *Computer Science*, Aug., 1995, Louisiana State University, Baton Rouge, LA.
Minor in *Statistics*.
- B. S. in *Computer Science*, July, 1982, Beihang University, Beijing, China.

Certification

- CSA Certified Solaris 2.X (Unix) Administrator, SUN Microsystems, Dec. 1997.

Work Experience

- 09/97-06/00, *Assistant Professor*; 07/00-06/05, *Associate Professor(tenured)*; 07/05-present, *Professor*, Department of Information and Computer Sciences, Metropolitan State University, Minneapolis/St. Paul, Minnesota. Courses taught: Graduate Courses: *Cryptography and Computer Network Security, Cyberspace Security Engineering, Software Design of Information Assurance Systems, Forensic Computing, and Research Seminar*; Undergraduate Courses: *Computer Networks, Computer Security, Operating Systems, Client/Server Architecture, Building Services on the Internet, Software Engineering, Database Management Systems, Sequential and Parallel Algorithm Design, Capstone Project, Telecommunications and Computers, Data Structures, Java Programming with the Elementary Data Structures, Structured Programming, Modeling Objects and Events, Java Programming with Objects, and Java Programming Fundamentals*.
- 09/08-08/09, *Visiting Professor*, Academic Center for Computing and Media Study, Kyoto University, Kyoto, Japan. Duties include: *collaborating on a project entitled "A Comparative Study of the United States and Japan in the Cyber Security and Computer Forensics."*
- 05/02-08/08, *Chairperson* of Department of Information and Computer Sciences, Metropolitan State University, Minneapolis/St. Paul, Minnesota. Duties include: *develops department budget and administers it according to university, college and department policies; directs student advising program; coordinates department interactions with student organizations; coordinates department student recruitment activities; ensures that student concerns and complaints are properly addressed; develops proposed department class schedule and long term schedule for course offerings; prepares and moderates department weekly meetings and department annual meetings; coordinates the updates of the existing curricula; leads the new program development through proposals, planning, and implementation*.
- 07/98-08/08 *Systems and Lab Supervisor/Administrator*, Department of Information and Computer Sciences, Metropolitan State University, Minneapolis, Minnesota. Responsibilities included: network planning, lab equipment configuration, pricing, and purchasing; setting up and administrating two SUN Ultra 220 servers (Solaris 10) with 28 Blade workstations, two Linux servers (Redhat and SUSE), and two Microsoft Windows servers with 24 workstations; A mobile lab with 24 laptops configured with the VMware and Solaris, Linux (SUSE), and Microsoft Windows 2003 servers; training and supervising the lab manager and student assistants.
- 09/99-08/02 *Adjunct Faculty*, Graduate Program in Software, University of St. Thomas, St. Paul, Minnesota. Workshops taught: *"Introduction to Unix Operating System", "Advanced Unix Operating System", and "Introduction to XML."*

- 08/95-08/97 Assistant *Professor*, School of Computer & Information Sciences, Georgia Southwestern State University, Americus, Georgia. Courses taught: Graduate/Undergraduate: *Design of Operating Systems, Microcomputer Network Management (Novell Netware), Digital Communications and Computer Networks, Object-Oriented Programming (C++)*; Graduate only: *Distributed Operating Systems, Information and Education on the Internet*.
- 08/95-08/97 Systems *Administrator*, Office of Information Technology, Georgia Southwestern State University, Americus, Georgia. Responsibilities included: administering six academic computing laboratories and the entire campus email system, contacting vendors for purchasing supply and new equipment, writing the policies for the growing campus network computing, and supervising the computer technicians and student workers. The labs are included: a SUN UNIX Lab which has 20 SUN Sparc workstations; an IBM RS/6000 model 570 that provides students with the regular class accounts, the fast line printer access, and dial-in service (10 phone lines); more than 100 Intel Pentium, 486 and 386 with the Windows 3.11, Window 95, Window NT 4.0 and NetWare 3.2 file servers are distributed in the Microcomputer Lab, Multimedia Lab, Computer Hardware Lab, and Network Management Lab. Those labs are used for the courses offered within the school as well as the courses offered by other schools and departments on the campus. In addition, a UNIX server using Solaris 2.5 with 10.4 Gbytes disk space is implemented as the email server that supports the email service for the faculty members, staff and students all over the campus. A SUN Ultra II with the Solaris 2.6 is used as the faulty web server for the purpose of the web course development.
- 01/92-07/95 *System Manager*, Software Engineering Laboratory, Louisiana State University, Baton Rouge, Louisiana. The system consists of 7 DEC 5000/120 workstations. Duties included: software development, system and network setup, maintenance, upgrading the system and the system and user administration.
- 01/94-08/94 *Research Assistant*, Louisiana State University, Baton Rouge, Louisiana. Worked on the NASA project titled "Reengineering of Systems for a Distributed Processing Environment".
- Summer'92 and '93 *Computer programmer*, Water Quality Laboratory, Louisiana State University, Baton Rouge, Louisiana. Duties included: writing programs for simulating the crawfish production using FORTRAN 77 with the window extension; maintaining the computer facilities within the laboratory.
- 09/90-05/95 *Teaching Assistant*, Louisiana State University. Duties included: taught "Software Engineering"(undergraduate) and "Introduction to Programming Languages"(undergraduate); assisted to the instructors for "Operating Systems," "C programming language" and "IBM/370 Assembly language" classes.

Professional Memberships:

- Member of the High Tech Crime Investigation Association (2006 to present)
- Member of the International Information System Forensics Association (2004 to present)
- Member of the IEEE (1994 to present).
- Member of the ACM (1992 to present).

Uniform Vita and Biographical Data Sheet

(7/1/05)

Kenneth E. Brumbaugh

Principal Office Address

Information Technology Department
Metropolitan State University
700 East Seventh Street
St. Paul, MN 55106-5000
Phone: (651) 793-1248
Fax: (651) 793-1246
Cell: (651) 269-9988

Residence Address

1373 - 7th Street SW
New Brighton, MN 55112
(651) 631-2343

Internet E-Mail Addresses

ken.brumbaugh@metrostate.edu

Professional Experience

<u>Dates</u>	<u>Position</u>	<u>Organization</u>	<u>Location</u>
2001 - present	Assoc. V.P., & CIO	Metropolitan State University	St. Paul, MN
1998 - 2001	Assoc. V.P., Dean	Minneapolis Comm. & Tech. Coll.	Minneapolis, MN
1996 - 1998	Director of Acad. Tech.	Millikin University	Decatur, IL
1994 - 1996	Technology Director	Mounds View Public Schools	St. Paul, MN
1989 - 1994	Tenured Assoc. Professor	Technology & Cognition Dept.	University of North Texas, TX
1990 - 1993	Executive Director	Texas Center for Educ. Technology	University of North Texas, TX
1987 - 1989	Full-time Consultant	Commodore Business Machines	West Chester, PA
1974 - 1986	Executive Director	Minnesota Educ. Computing Corp.	St. Paul, MN
1971 - 1974	Instructor	Science Education Department	Wayne State University, MI
1969 - 1971	Instructor	Physical Sciences Department	Towson State University, MD
1967 - 1969	Physics Teacher	Tremper High School	Kenosha, WI
1965 - 1967	Math/Physics Teacher	Hollidaysburg High School	Hollidaysburg, PA

Higher Education

<u>Year</u>	<u>Degree</u>	<u>Major</u>	<u>Institution</u>
1974	Ph.D.	Curriculum Development	Wayne State University, MI
1970 - 1971		Graduate course work	University of Maryland, MD
1969	M.S.	Teaching of Physics	University of Wisconsin-Milwaukee, WI
1966		NSF Summer Physics Institute	Valparaiso University, IN
1965	B.S.	Mathematics/Physics	Shippensburg State University, PA

Professional Summary:

Administration:

Metropolitan State University (2001 - Present): Report to the Vice President for Finance and Administration and serve on the President's Cabinet; responsibilities include: 1) all administrative and academic computing and information uses; supervise an IT staff of 25 full-time and numerous student workers, who support all data and information computing activities, all web and portal activities; day-to-day computer and network operations, and all telephony services for the three campuses of the university.

Minneapolis Community & Technical College (1998 - 2001): Reported to the Vice President for Academic Affairs and member of the President's Council; responsibilities included: 1) all administrative and academic computing and information uses, and 2) "computing-related" academic dean duties on an urban, 5000 student, combined community and technical college campus; supervised an IT staff of 15 full-time and numerous student workers, who supported computing and media activities of students, staff, faculty and administration, and 12 (FTE) instructors in Computer Careers and Graphic Design/Electronic Publishing.

Millikin University (1996 - 1998): Was responsible to the Provost for all teaching and learning technology uses on a 2000 student campus, supervised a staff of 5 full-time and numerous student workers, who supported students, staff, faculty and administration. Served as a member of the university administrative team and listed as a faculty member (Associate Professor) in the Education Department. Administered a multi-million dollar Trustee Technology Allocation to upgrade computer labs, teaching stations, employee workstations, networks, web server, and GroupWise e-mail system.

Mounds View Public Schools (1994 - 1996): Was responsible to Executive Director for Instruction and to the School Board for all technology and telecommunications responsibilities in 18 district buildings, having 2000+ computers, LAN/WAN voice, data, television, and video connections into every classroom. Directed 10 staff devoted to computer training, cabling, networking, repair, distribution and related media and technology activities for all instructional and administrative purposes. Administered a \$5.5 million technology project.

Texas Center for Educational Technology (1990 - 1993): Was responsible to a separate Board of Directors and to the University of North Texas for all aspects of the statewide educational computing research and development center, including the research agenda, personnel (7 full-time employees), budget (\$600,000 - \$1,000,000/year), operations and dissemination, fund-raising, and public relations.

Minnesota Educational Computing Consortium (1974 - 1986): Twelve years of progressive management responsibilities for one of the nations largest public educational computing software and support organizations, including serving as the chief executive officer responsible for planning and operations (300 plus products produced and all Minnesota schools and universities served), budget (\$5,000,000 - \$7,500,000/year), sales, marketing and customer relations (4,500 member school districts nationwide), personnel (100 plus employees), and to the Board of Directors.

Graduate Teaching:

University of North Texas. TX: (1989 - 1994) Computers & School Administration, Computer Education Tools, Computer Graphics for Media Presentations, Computers in Education, Studies in Education - Special Summer Institute, Special Problems

Adjunct faculty, Mankato State University, MN: (1976 - 1978) and University of Wisconsin - River Falls (1974 - 1975); taught "MECC" in-service courses related to introduction to computer science and implementing computing in the classroom

Wayne State University, MI: (1970 - 1974) Curriculum Planning in Elementary and Secondary School Science - CAI in Science, Introduction to the Use of Computers in Education, Computer Applications and Field Study in Teaching

Undergraduate Teaching:

- Metropolitan State University, MN: Understanding and Using the Internet (2005), Computer Literacy (2004)
- University of North Texas, TX: (1989 - 1994) Introduction to Computers, Computers in the Classroom
- Augsburg College, MN: (1986 - 1987) Media and Technology
- Wayne State University, MI: Supervision of Student Teachers; Science in the Elementary School, Methods and Materials of Instruction in Secondary School Science I, II
- Towson State University, MD: Physical Science I, II

Grants & Contracts**Received during 1990 - 2000 ***

<u>Beginning Date- Ending Date</u>	<u>Title</u>	<u>Agency</u>	<u>Amount</u>
September, 1999 - August, 2001	"E-Commerce" Curriculum Development and Implementation (w. Customized Training)	MN Job Skills Partnership	\$300,000
April, 1997 - July, 1997	"Introduction to the Internet" workshop for Associated Colleges of Illinois faculty	Amertiech Corp.	\$36,312
December, 1996 - June, 2002	"Accelerating the growth of technology at Millikin" (\$25,000 per year for technology)	Lumpkin Family Foundation	\$125,000
September, 1993 - August, 1994	"Improving College of Education ..." (In-kind support of a wide variety of software)	Microsoft Corp.	\$12,000
September, 1992 - August, 1993	Texas Center for Educational Technology (Inter-agency contract for services)	Texas Education Agency	\$500,000
June, 1992 - August, 1993	Sustaining Membership in TCET (Gift, plus in-kind contributions, w. Hardman, L., et. al.)	Simon & Schuster, Inc.	\$20,000 \$80,000
January, 1992 - November, 1992	Funding for 1992 TCET TexContest (Cash, plus donation of productivity software)	Microsoft Corp.	\$10,000 \$28,300
September, 1991 - August, 1992	Texas Center for Educational Technology (Inter-agency contract for services)	Texas Education Agency	\$400,000
September, 1991 - August, 1992	Cap. Equip. Support - C.E.C.S. Depart. (University support to department for TCET research, w. Poirot, J.)	Univ. of North Texas	\$75,000
June, 1991 - August, 1993	Sustaining Membership in TCET (In-kind contributions related to in-service workshops)	Apple Computer, Inc.	\$100,000
June, 1991 - August, 1992	Partnership membership in TCET (Cash contribution)	Education Service Centers of Texas	\$25,000
June, 1991 - August, 1992	TCEA support for TCET (Cash, plus in-kind in services, w. Duffey, D., & et al.)	Texas Computer Educ. Assoc.	\$5,000 \$23,000
June, 1991 - August, 1993	Sustaining membership in TCET (Gift, plus in-kind contributions)	Jostens Learning Corp., Inc.	\$15,000 \$85,000

07-01-05 May, 1991 - August, 1991	Training Development for TENET (Development contract, w. Knezek, G., Poirot, J. & Hudspeth, D.)	Texas Education Agency	\$168,800
February, 1991 - April, 1991	Study of educational videodisc usage (Contract, plus in-kind equipment support, w. Schlieve, P.)	Pioneer Comm. of America	\$33,250
January, 1991 - NA.	University/TCET Use of IBM equipment (Equipment contribution, w. Schlieve, P.)	Intl. Business Machines	\$215,000
January, 1991 - December, 1991	Assessment and evaluation of ILSs (R&D contract, plus contribution of ILS software, with Poirot, J., Norris, C., & Schlieve, P.)	WICAT Systems	\$40,900 \$110,500
January, 1991 NA.	TCET Administration Uses of Technology (Donation of computer equipment)	Apple Computer, Inc.	\$12,000
September, 1990 - NA.	Distance Learning Technology (Reduced purchase/installation fees and course registrations, with Knezek, G.)	TI-IN	\$14,750
September, 1990 - August, 1991	Cap. Equip. Support - C.E.C.S. Depart. (University support to department for TCET research, with Poirot, J.)	Univ. of North Texas	\$100,000
June, 1990 - August, 1991	Texas Center for Educational Technology (Inter-agency contract for services, with Poirot, J., et al.)	Texas Education Agency	\$800,000
January, 1990 - NA.	Amiga graphics/video laboratory (Donation of equipment, with Poirot, J.)	Commodore Business Mach.	\$60,777

* Lesser \$ amount grants (below \$10,000) not listed include ones from Apple Computer, Macromedia, Texas Education Agency, Pioneer Communications, WICAT, Tandy Computers, Texas Education Service Center #2, MECC, Smith Systems, Optical Data, Emerging Technology Consultants, EduQuest (IBM), University of North Texas, Commodore, and Fort Bend ISD.

Federal Grants Received: **

Fall, 1979 - Spring, 1980	Introduction to Microcomputers (Funded seven one-day seminars at locations in MN and MI)	National Science Foundation	\$24,000
June, 1974 - January, 1974	Computer Applications for Teachers - II (Summer institute for science, social studies, and mathematics teachers)	National Science Foundation	\$35,200
June, 1973 - May, 1974	Computer Applications for Teachers - I (Summer & Fall institute for science teachers)	National Science Foundation	\$49,500

** During MECC employment, I also obtained contracts with: Acorn Computers, Inc., Atari, Inc., Commodore Business Machines, Inc., International Business Machines, Inc., and Tandy/Radio Shack Computers.

Publications, Presentations, and Creative Activities

Books:

Brumbaugh, K. (1997). Atlas for the information superhighway - Instructor's manual. Cincinnati, OH. Southwestern Publishing. (ISBN: 0-538-65865-7) [Sole contributing author]

Brumbaugh, K., Schlieve, P., Young, J. & Holcomb, T. (1993, 1992 & 1991). K-12 planning guide for videodisc usage. Denton, TX: University of North Texas, Texas Center for Educational Technology.

Brumbaugh, K, & Radish, D. (1982). Establishing instructional computing: The first steps. Bloomington, Indiana: Phi Delta Kappa.

Chapters in Books:

- Brumbaugh, K. (1992). Icons. In G. G. Bitter, G. B. Davis, D. J. Gabaldon, W. I. Grosky, C. A. Norris, M. D. Roblyer (Eds.), MacMillan Encyclopedia of Computers (pp. 513-516). New York: MacMillan.
- Brumbaugh, K. (1986). Development and dissemination of software: One state's strategy. In J. N. Fox & A. Lesgold (Eds.), Computers in School: Strategies for Policy Development and Implementation. (pp. 142-153). Hillsdale, New Jersey: Lawrence Erlbaum. (Commissioned chapter for the NIE.)
- Brumbaugh, K. (1982). Computer literacy: 1985. Computer literacy. (pp. 233-263). San Diego, California: Academic Press. (Also distributed as special reprint by The Computing Teacher, 8(4), 49-50.)

Articles: (Refereed)

- Brumbaugh, K., & McRae, M. S. (1995). An Internet primer for community college administrators. Community College Journal, 19(1), 1-11.
- Brumbaugh, K., & Hart, N. (1993). File transfer protocol: the educator's key to multi-platform file transfers. The T.H.E. Journal, 20(10), 65-69.
- Brumbaugh, K., & Poirot, J. L. (1993). The teacher as researcher: presenting your case. The Computing Teacher, 20(6), 19-22.
- Brumbaugh, K. (1992). A comparison of educators and professionals expectations for a statewide educational technology center. Journal of Research on Computing in Education, 25(2), 220-231.
- Brumbaugh, K., Holcomb, T. & Scannell, J. (1992). A statewide study of the relationship of school district enrollment and educator in-service technology training needs. International Society for Technology in Education SIGTC Connections, 9(1), 19-23.
- Brumbaugh, K., & Steele E. (1991). Learning sphere: A pilot for information age learning. The Computing Teacher, 18(7), 14-16.
- Brumbaugh, K., & Crossland, B. (1991). What should a center for educational technology provide? T.H.E. Journal, 18(9), 78-80.
- O'Dell, D. & Brumbaugh, K. (1991). Developing a technology plan. Texas Study of Secondary Education, 1(1), 32-33.
- Brumbaugh, K., & D'Angelo, J. (1990). Desktop video: Is it in your future? Educational Resources & Techniques, 29(3), 13-16.

Articles: (Non-refereed)

- Brumbaugh, K. (1995). Do computers have short lives. Texas Computer Education Association Newsletter, Annual Conference Issue, February.
- Brumbaugh, K., Holcomb, T. Schlieve, P., & Young, J. (1991). Planning ahead for videodiscs. School Executive, September/October, 8-9, 16.
- Brumbaugh, K., & Leonard, J. (1990). Multimedia on the Amiga; Keyboarding on the C-64. Electronic Learning, 9(8), 38-39.
- Brumbaugh, K. (1990). Amiga VIVA: power, cost-efficient multimedia. Electronic Learning, 9(4), 44-45.
- Brumbaugh, K. (1984). Reflections on educational computing. Creative Computing, 10(11) 170-173.

Proceedings:

- Brumbaugh, K., & Resta, P. (1993). Educational technology research and development: the Texas challenge. Proceedings of the National Educational Computing Conference 1993, (p. 151). Eugene, OR. International Society for Technology in Education.
- Brumbaugh, K., & Poirot, J. (1993). Learning about ILSs: what has research shown. Proceedings of the National Educational Computing Conference 1993, (p. 57). Eugene, OR. International Society for Technology in Education.
- Brumbaugh, K. (1992). Educational technology research and development: what works in Texas. Proceedings of the National Educational Computing Conference 1992, (p. 89). Eugene, OR. International Society for Technology in Education.
- Brumbaugh, K., & Poirot, J. (1991). The Texas center for educational technology: current and future solutions. Proceedings of the National Educational Computing Conference 1991, [ISBN 0-924667-69-9] (p. 140). Eugene, OR. International Society for Technology in Education.
- Brumbaugh, K., Poirot, J. & Beckman, C. (1991). Applying research to educational technology. Technology and Teacher Education Annual - 1991. (pp. 201-204). Greenville, NC. Society for Technology and Teacher Education.
- Brumbaugh, K. (1975). Equalizing instructional computing on a statewide basis. Proceedings of the Association of Educational Data Systems Conference. Virginia Beach, VA. Association of Educational Data Systems.

Technology-based Materials:

- Brumbaugh, K. & Lucas, L. (1991). Interactive videodisc training: presenting and authoring with AmigaVision [computer programs and training manual]. St. Paul, MN: Emerging Technology Consultants.
- Brumbaugh, K. (Producer), Mortensen, M. (Director), & Holcomb, T. (Narrator). (1991). Partners: the Sanger connection [video tape (VT#91-01)]. Denton, TX: University of North Texas, Texas Center for Educational Technology.
- Hudspeth, D., Berning, A., Higdon, J., Brumbaugh, K., & Stout, C. (1991). TENET Moderator's Guide. Denton, TX: University of North Texas, Texas Center for Educational Technology.
- Knezek, G., Jones, G., Brumbaugh, K., & Stout, C. (1991). TENET user training guide. Denton, TX: University of North Texas, Texas Center for Educational Technology.
- Poirot, J., Paschal, L., Brumbaugh, K., & Stout, C. (1991). TENET curriculum integration guide. Denton, TX: University of North Texas, Texas Center for Educational Technology.
- Brumbaugh, K. (Ed.) (1990). 20/20 Vision [computer programs and training manual]. Dallas, TX: Vertical, Inc.
- Brumbaugh, K. (1990). CanDo IntroPak [computer programs and training manual]. Dallas, TX: INOVAtronic, Inc.

Editorial Items:

- Brumbaugh, K. (1995). (Review and contributor). Internet Activities: Adventures on the Superhighway. Southwestern Publishing, Cincinnati, OH.
- Brumbaugh, K. (1995). (Review and contributor). Conquering the Internet. Southwestern Publishing, Cincinnati, OH.
- Brumbaugh, K. (Ed.). (1992 Annual Report). The ICET report. Denton, TX: University of North Texas, Texas Center for Educational Technology.

- Brumbaugh, K. (1992). (Research/Higher Education Strand Editor). 1992 Technology in the Rockies Conference. International Society for Technology in Education, Eugene, OR.
- Brumbaugh, K. (Ed.). (1991 - 1992) Tex-CET Times, 1(1), 1(2), 2(1), 2(2), 2(3). Denton, TX: University of North Texas, Texas Center for Educational Technology.
- Brumbaugh, K. (Ed.). (1979 - 1986). (Edited and critiqued 150 - 200 computer programs and training materials, many of which won national awards, and most of which were used in at least 5000 school districts nationwide). St. Paul, MN: Minnesota Educational Computing Corporation.
- Brumbaugh, K. (Ed.). (1984 - 1985). (MECC Annual Report). St. Paul, MN: Minnesota Educational Computing Corporation.
- Brumbaugh, K. (Ed.). (1984). MECC organizational structure & governance report. St. Paul, MN: Minnesota Educational Computing Consortium.
- Brumbaugh, K. (Ed.). (1981). Instructional microcomputing and timesharing: a Minnesota perspective. St. Paul, MN: Minnesota Educational Computing Consortium.
- Brumbaugh, K. (Ed.). (1979). Microcomputer report of the Minnesota Educational Computing Consortium. St. Paul, MN: Minnesota Educational Computing Consortium.
- Brumbaugh, K. (Ed.). (1978). Report of the Minnesota Educational Computing Consortium microcomputer task force. St. Paul, MN: Minnesota Educational Computing Consortium. [Included the RFP that led to Minnesota's adoption of Apple computers]
- Brumbaugh, K. (Ed.). (1975 - 1986). (MECC newsletters). St. Paul, MN: Minnesota Educational Computing Consortium/Corporation.

Other Publications:

- Brumbaugh, K. (1991). Texas launches laser disc study. Tech Trends, 36(3), 36.
- Brumbaugh, K., D'Angelo, J., Beckman, C. & Duffey, D. (1991). Technology excellence projects - 1991 (PB#91-2). Denton, TX: University of North Texas, Texas Center for Educational Technology.
- Brumbaugh, K., & Kostelnik, J. (1990). AmigaVision: multimedia authoring tool. Electronic Learning, 10(2), 26.
- Brumbaugh, K., & D'Angelo, J. (1990). The Amiga 3000. Electronic Learning, 10(2), 26.
- Brumbaugh, K. (1974). An analysis of the effect of selected factors upon the implementation of computer usage in secondary school science instruction. Doctoral Dissertation. Wayne State University, Detroit, MI.

Refereed (Invited) Presentations/Papers:

- Brumbaugh, K., (1996, November). As ancient a Plato: computer-based education from Minnesota. 1 of 6 invited presentations for the Charles Babbage Institute's special "50 Years of Computing in Minnesota" lecture series, St. Paul, MN.
- Brumbaugh, K., Marchaim, U. & Litto, F. (1994, March). How should developing countries plan for and implement educational technology. Presented at ISTE conference, London, England.
- Brumbaugh, K. (1993, October). Review the literature on technology, learning and education: what do we know from research. Presented at INFOCON '93 conference, Buenos Aires, Argentina.
- Brumbaugh, K. (1993, September). Internet & the curriculum, and File transfer via Internet. Presented at the Oklahoma Encyclomedia conference, Oklahoma City, OK.

- Brumbaugh, K., & Resta, P. (1993, June). Educational technology research and development: the Texas challenge. Presented at the National Educational Computing Conference, Orlando, FL.
- Brumbaugh, K., & Poirot, J. (1993, June). Learning about ILSs: what has research shown. Presented at the National Educational Computing Conference, Orlando, FL.
- Brumbaugh, K. (1993, June). Traveling Internet via FTP. Presented at the statewide Texas Computer Education Association Conference, Austin, TX.
- Brumbaugh, K. (1992, November). Free telecommunications packages: (FTP) via FTP. Presented at the Texas Computer Education Association Regional Conference, Dallas, TX.
- Brumbaugh, K., & Culp, G. (1992, October). Promoting statewide K-12 educational technology via university/private sector collaboration. Poster session at EDUCOM annual conference, Baltimore, MD.
- Brumbaugh, K. (1992, October). How can research benefit educational technology. Presented at the International Society for Technology in Education 'Technology in the Rockies' Conference, Denver, CO.
- Brumbaugh, K., Holcomb, T. & Scannell, J. (1992, October). A statewide study of the relationship of school district enrollment and educator in-service technology training needs. Presented at the International Society for Technology in Education 'Technology in the Rockies' Conference, Denver, CO.
- Brumbaugh, K., Holcomb, T., Scannell, J., & Holmes, K. (1992, June). K-12 educators and administrators: Their technology training needs. Poster session presented at the National Educational Computing Conference, Dallas, TX.
- Brumbaugh, K., Holmes, K., & Scannell, J. (1992, June). The Texas Center for Educational Technology: What is it and what does it do? Poster session presented at the National Educational Computing Conference, Dallas, TX.
- Brumbaugh, K., Culp, G., Palombo, D., & Holmes, K. (1992, June). Educational technology research and development: What works in Texas. Panel presentation at the National Educational Computing Conference, Dallas, TX.
- Brumbaugh, K. (1992, March). Texas technology tips: benefits and results. Presented at the International Conference on Education and Technology, Paris, France.
- Brumbaugh, K. (1991, October). What has TCET done for education in 1990-91 and What are TCET's plans for education in 1991-92. Presented at the Texas Association for Educational Technology annual conference, Plano, TX.
- Brumbaugh, K. (1991, June). What has TCET done for education in 1990-91. Strand Kickoff speaker at the Texas Computer Education Association annual conference, Corpus Christi, TX.
- Brumbaugh, K., & Poirot, J. (1991, June). The Texas center for educational technology: current and future solutions. Paper presented at National Educational Computing annual conference, Phoenix, AZ.
- Brumbaugh, K., & Poirot, J. (1991, May). Texas center for educational technology report. Paper presented at the International Conference on Technology and Education, Toronto, ONT., Canada.
- Brumbaugh, K. (1991, April). Applying research to educational technology. Paper presented at Society for Technology and Teacher Education annual conference. Greenville, NC.
- Brumbaugh, K. (1990, November). Alternative funding strategies for technology in education. Presented at Texas Association of School Board's "Educational Technology into the 90's" Conference, Dallas, TX.
- Brumbaugh, K. (1990, October). Implementation of the Texas center for educational technology. Invited Paper presented as keynote address at Texas Conference on Teacher Education meeting, Ft. Worth, TX.

- Brumbaugh, K. (1990, February). Interactive video on the Mac, Amiga, and MS-DOS platforms: which is best for you?. Paper presented at Texas Computer Education Association annual meeting, Ft. Worth, TX.
- Brumbaugh, K. (1985). Keys to developing software. Invited paper presented at Computing in Underdeveloped Countries International Conference, Cuernavaca, Mexico.
- Brumbaugh, K. (1985). National curriculum planning. Paper presented at World Conference on Computers in Education, Norfolk, VA.
- Brumbaugh, K. (1984). The future. Paper presented at Educational Computing Conference in Ontario, Toronto, ONT., Canada.
- Brumbaugh, K. (1983). Computing developments in the United States. Paper presented at International Federation of Information Processing, Paris, France.
- Brumbaugh, K. (1983). Computer literacy. Paper presented at National Educational Computing Conference, Baltimore, MD.
- Brumbaugh, K. (1982). Educational computing. Paper presented at Educational Computing Conference in Ontario, Toronto, ONT., Canada.
- Brumbaugh, K. (1982). Fulfilling instructional computing needs. Paper presented at Association of Educational Data Systems annual meeting, Orlando, FL.
- Brumbaugh, K. (1981). Educational microcomputer courseware portability/exchange. Paper presented at World Conference on Computers in Education, Lausanne, Switzerland.
- Brumbaugh, K. (1980). A definition of computer literacy. Invited paper presented at MECC/HUMRRO Computer Literacy Conference, Reston, VA.
- Brumbaugh, K. (1975). Equalizing instructional computing on a statewide basis. Paper presented at Association of Educational Data Systems annual meeting, Virginia Beach, VA.
- Brumbaugh, K. (1974). Models for instructional computer usage in science. Paper presented at National Association for Users of Computer Applications to Learning annual meeting, Minneapolis, MN.
- Brumbaugh, K. (1974). Computers: a challenge for the motivated student. Paper presented at Junior Science and Humanities Symposium Midwest regional meeting, St. Paul, MN.
- Brumbaugh, K. (1973). Educational technology: a current appraisal. Paper presented at National Science Supervisors Association annual meeting, Detroit, MI.

Non-refereed Presentations: (selected examples only)

- Brumbaugh, K. (2000, February). Successful "Can Do" Spirit for Reinventing Computer-Related Classes. Presented at the League for Innovation Conference, Orlando, FL
- Brumbaugh, K. (1997, July). Troubleshooting the Mac, PowerPoint on the Mac, and Introduction to the Internet for Mac Users, Technology 101 Statewide Workshop, Chicago, IL.
- Brumbaugh, K. (1997, July). Comparing HTML authoring systems, Introduction to Internet Statewide Workshop, Decatur, IL.
- Brumbaugh, K. (1995, March). Technology and Telecommunications. Presented to the New Brighton League of Women Voters, Roseville, MN.
- Brumbaugh, K. (1993, March). Educational technology overview. One-day course conducted for CELTEC School/Castelo Branco University, Rio de Janeiro, Brazil.

- Brumbaugh, K. (1993, March). Educational technology topics in today's world. One-week course conducted at the Anhembi Morumbi University, Sao Paulo, Brazil.
- Brumbaugh, K. (1993, March). Educational technology overview. Two-day discussion session for graduate students at the University of Sao Paulo, Sao Paulo, Brazil.
- Brumbaugh, K. (1993, March). Educational technology overview. Two-day course conducted for the Shau-Lin School, Goiania, Brazil.
- Simms, R., Brumbaugh, K., Brown, D., Hodges, J. & Coulston, J. (1992, July). Preparing teachers to integrate technology into the classroom. Panel presentation at Texas Distance Learning Conference, Austin, TX.
- Brumbaugh, K. (1992, February). University and technology research and development collaboration. Presented at the Universidade Sao Paulo, Sao Paulo, Brazil.
- Brumbaugh, K. (1992, February). Changes in TCET. Presented at the Border Educational Technology Conference, El Paso, TX.
- Brumbaugh, K. (1992, January). What's current at TCET? Presented to members of the Texas Research and Evaluation Network, Houston, TX.

Conferences/Workshops Conducted:

- Faculty Member, 1997 Ameritech/ Associated Colleges of Illinois "Tech 101" Workshop, Chicago, IL. (45 attendees from 13 colleges and universities in Illinois)
- Director and Faculty Member, 1997 Ameritech/ Associated Colleges of Illinois "Introduction to the Internet" Workshop, Decatur, IL. (40 attendees from 17 colleges and universities in Illinois)
- Chairperson, 1985, 1984, 1983, and 1982 MECC Annual Educational Computing Conferences, Minneapolis, MN. (Approximately 2000 attendees per conference)
- Co-Chairperson, 1981 Association of Educational Data Systems annual convention, Minneapolis, MN. (Approximately 1000 attendees)
- Faculty, AEDS Workshop, Introduction to Microcomputers, Cincinnati, March, 1982 and January, 1981.
- Faculty, AEDS Workshop, Computers in Elementary Education, in Minneapolis, MN - November, 1978, January, 1980, and December 1980, and in Williamsburg, VA, March 1982.
- Instructional Team Member, Appalachian Educational Laboratory, Microcomputer Workshops, Cincinnati, July, 1981, and Tallahassee, September, 1981.
- Planned and conducted 2-day privately sponsored microcomputer training sessions for educators in Chicago and Denver, Spring, 1979, and in Phoenix, Washington, Indianapolis, and San Francisco, Spring, 1980.
- Responsible for the production of an annual MECC timeshare computing conference and programming contest for Minnesota teachers, professors, and students, 1974- 79.
- Coordinator of 1976 Roseville, MN Computer Laboratory Project where 6600 individuals gained first-time exposure to instructional computing.
- Member, 1975 Association of Computing Machinery annual conference Executive Planning Committee, Minneapolis, MN. (Approximately 2000 attendees)

Recent Conference Participation: (No presentation given)

EduCause, Denver, CO, 2004

MPC Computers Summit Conference, Sun Valley, ID, 2004, 2005 (Member of National Advisory Board)

Gartner ITExpo Conference, Orlando, San Diego, and San Francisco, 2002, 2003, 2004, 2005

MnSCU Annual IT Conference, Brainerd, MN, Annually (1999 - 2004)

COMDEX, Chicago, IL, 2001

Computer Telephony Conference, New York, NY, 2000

League for Innovation Meetings), Orlando, FL, 2000, & Miami, FL, 1998

Florida Educational Technology conference, Tampa, FL, 2000, 1993 & 1991.

Syllabus Regional Conference, Dallas, TX, 1999

EDUCOM University Executive Seminar and Directors Seminar, Aspen, CO, 1997

Education Site Visitations: (past decade)

University/college visitations include: All Twin Cities and numerous greater Minnesota MnSCU institutions (1998- present), Northwest Technical College, MN (2001), Saint Xavier University, IL (1997), North Central College, IL (1997), University of North Dakota, ND (1996), Johns Hopkins University, MD (1997), Glasgow Caledonia University, Scotland (1994), University of Buenos Aires, Argentina (1993), University of the Fronteir, Temuco, Chile (1993), William Penn College IA (1993), Northern Michigan University, MI (1993), University of Sao Paulo, Brazil (1993), The University of Texas at Austin (20+ times during 1990 - 1993), and the University of Houston - Clear Lake (5 times during 1990 - 1993), Texas Southern (1992), Texas Tech (1992), Lamar University (1991), Texas Woman's University (1990)

Texas school district and regional centers visitations include: Denton, San Benito, Beaumont, Pasenda, Aubrey, North East, Carrollton/Farmers Branch, Sanger, McKinney, Sorocco, and Ft. Bend; Region 2 (1993), Region 10 (1992), Region 13 (1992), Region 18 (1991 & 1990), Region 19 (1992), Region 17 (1991), Region 6 (1991), Region 19 (1990)

Honors:

One of five invited lecturers for the Charles Baggage Institute's special '50 Years of Computing in Minnesota' lecture series, November, 1996 - only educator selected

Awarded tenure by the University of North Texas, June, 1993.

Named as a contributing editor to T.H.E. Journal, August, 1992 - 2003.

KuoDi Jian

Last updated: 1/12/2010

E-mail: kuodi.jian@metrostate.edu

Home page: www.cs.ndsu.nodak.edu/~jian

Keywords Computer Science Engineer. Java programming. Web development. .NET framework. ADO. ATL. Software developer. Software agent. Database. Software Engineer. CORBA. Webmaster. Software designer. 3-D modeling. System architect. PHP. XML. Professor of Computer Science. PH. D. of Computer Science.

Research Interests My research interests include Bioinformatics, real-time control systems, data base, and artificial intelligence. I published many papers in these areas.

ARCHITECTURES

Computer skills Experiences in object-oriented programming using JAVA, C++, SmallTalk. Web publishing uses PHP, Active Server Page (ASP), Active Template Library (ATL) based COM, XML/XSLT, and SQL database. Develop software using Client/Server architecture, emerging intelligent Software Agent Architecture, Industry distributed architecture CORBA, real-time operating systems, and Computer Graphics.

Experiences in Win32 API programming(used for projects), PHP Web programming, object-oriented design pattern using Uniformed Modeling Language UML, X Window system, and Multimedia programming.

Deep understanding of Microsoft distributed Common Object Model (DCOM), .NET framework, and Microsoft's BackOffice Server Suite. Extensive study in concurrent and parallel system modeling and computer performance evaluation.

LANGUAGES

Extensive use of the following computer languages: JAVA(used for project), SQL, C/Visual C++ (used for projects), Visual basic (used for projects), SmallTalk (used for projects), Fortran 77, 68000 Assembly. Extensive use of the following system development environments: Microsoft's Visual Studio, Unix shell programming, Java Development Kit JDK, IBM's enterprise VisualSmallTalk. A solid knowledge and occasional use of PROLOG, LISP, ANSI Scheme, lex & yacc, Window9x/NT script, COBOL.

OPERATING SYSTEMS

Experiences in the following operating systems: Windows 98/2000/XP/NT, UNIX (Sun, SGI, DEC Workstation, and PC Linux).

Experience *July 2003-Current ICS Dept., Metropolitan State University, St. Paul, MN 55403*

Assistant Professor ---Teach Computer classes in the ICS department. The things that I have done: advising grad-students with their thesis, teach Java programming language, computer architecture and organization, data structures, web design and implementation, and real-time operating systems.

August 2001-May 2003 Computer Science Dept., NorthDakota State University, Fargo, ND 58105

Adjunct Professor ---Teach CS316 (software testing), ECE374 (computer architecture) for NDSU.

Nov 1999-August 2001

Banner Health System, Fargo, ND 58106

Systems Architect---Developed software applications for healthcare systems.

- Yellowpage web-based library system (from design to finish, includes user manual, use SQL server and MFC).
- Web-based Bio-Technology search Engine (from design to finish, includes user manual).
- Patient Total Care Information System TCIS (participated as a team member and wrote a Namex component using SmallTalk).
- Legal File System (wrote the Web front end for the system using SmallTalk, the backend database is an object database called GemStone).
- The digital signature module works with the web system to conduct transactions on line, features key generation, documentation signing, and base64 encode/decode (Visual C++).

July 1999-Nov 1999

Math Dept., North Dakota State University, Fargo, ND 58105

Computer system administrator

- Installed and maintained computers in a cluster and the LAN network for the math department.

May 1998-May 1999 Computer Science Dept., North Dakota State University, Fargo, ND 58105

Sub-team leader of Word Wide Web Instructional Committee WWIC project

- Developed educational games based on Internet(Java)

- Developed comprehensive tools for lambda-MOO on the server/client sides.
- Coordinated the activities among team members.

Aug 1997-May 1999 *Computer Science Dept., North Dakota State University, Fargo, ND 58105*

Teaching Assistant

- Taught CS160 (Fortran Programming). 10 hours per week.
- Taught CS146 (Business Use of Computers); Windows98/95 operating systems, Microsoft Word, Excel, Access, and Netscape. 15 hours per week.

Nov 1995-Aug 1997 *Computer Science Dept., North Dakota State University, Fargo, ND 58105*

Research Assistant

- Participated in Navy missile routing (Orion) project(C++, X Windows).
- As a team member, designed and wrote Ampl/Cplex program to generate trajectories for missiles, and wrote programs that use Unix networking, Unix shell, tcl/tk, vtk, and OpenGL/Mesa. 10 hours per week.

Education *Aug 1992-2002* *North Dakota State University* *Fargo, ND 58105*

- (08/95-05/02) Ph. D. in Computer Science and Operations Research with overall GPA 3.77/4.0.
- (08/92-08/95) M.S. in Dept. of Computer Science and Operations Research with 3.76/4.0.

Jan 1988-Aug 1992 *University of Mary Hardin-Baylor* *Belton, TX*

- B.S. in Dept of Computer Science with GPA 3.08/4.0.

Personal Info I am a US citizen; enjoy flying personal airplanes.

Publications Method for Processing Views on Demand in Data Warehouse Environment, Proceedings of the ISCA 9th International Conference, Orlando, Florida USA, pp. 64-69, Dec., 1996. (ISBN: 1-880843-18-8)

The multiple Use of Bit-map Vectors in DBMS, Mid-continent Information and Database Systems Conference, Fargo, ND, USA, pp. 23-39, August, 1996.

Processing Materialized Views Using Domain Vectors in a Data Warehouse Environment, Mid-continent Information and Database Systems Conference, Fargo, ND, USA, pp. 60-69, August, 1996.

Agent-Java: An Integration of Java and KQML, Mid-continent Information and Database Systems Conference, Fargo, ND, USA, pp. 70-81, August, 1996.

Alternative Mobile Agent System and Software Environments, Proceedings of the ISCA 11th International Conference, Las Vegas, Nevada, USA, pp. 165-170, Nov., 1998. (ISBN: 1-880843-26-9)

A Distributed Agent Architecture, Proceedings of the ISCA 11th International Conference, Las Vegas, Nevada, USA, pp. 160-164, Nov., 1998. (ISBN: 1-880843-26-9)

Research and Development of Virtual Worlds for Immersive Instruction, 32nd Annual Small College Computing Symposium, University of Wisconsin, LA CROSSE, USA. On CD, April 1999.

Hierarchical Problem Solver for Software Agent, 8th International Conference on Intelligent Systems, Denver, Colorado, USA, pp. 27-32, June 1999. (ISBN: 1-880843-28-5)

Problem Solver for Distributed software Agent, 44th SPIE—The International Society for Optical Engineering, Colorado Convention Center & Marriott City Center, Denver, Colorado USA, Volume 3805 pp. 171-183, July 1999 (ISBN: 0-8194-3291-1)

Jian, K., Constructing a Solid Real-Time Operating Systems Course in Computer Science Major, *Journal of Computing Sciences in Colleges*, Consortium for Computing Sciences in College, Volume 22, number 4, pp 65-74, April, 2007.

Liu, J., Gottschalk, L., Jian, K., Textbooks for Computer Forensic Courses: A Preliminary Study, *Conference on Digital Forensics, Security and Law (ADFSL 2007)*, Arlington, Virginia, USA, April 18-20, 2007.

Hennebry, M., Jian, K., Nygard, K., Dynamic Network Refinement in Automated Aircraft Route Planning, *Proceedings of 2007 IEEE International Conference on Electro/Information Technology*, Marriott O'Hare, Chicago, IL, USA, May 17-20, 2007, pp. 416-420. Digital Object Identifier 10.1109/EIT.2007.4374507.

MILTON H. LUOMA, JR.

1916 East 123rd Street
Burnsville, Minnesota 55337
952 894-3213 (home) 612 964-9514 (cell)
Milton.Luoma@gmail.com

ACADEMIC CREDENTIALS

- JURIS DOCTOR *CUM LAUDE*, William Mitchell College of Law, St. Paul, Minnesota; Minnesota Mining & Manufacturing Company Scholarship (*Most Promising Student in Business Law*), Dean's List
- MASTER OF BUSINESS ADMINISTRATION, University of Dayton, Dayton, Ohio
- MASTER OF SCIENCE IN COMPUTER SCIENCE, University of Minnesota, Duluth, Minnesota; Phi Kappa Phi Honor Society (Top 5% of all graduate students)
- MASTER OF SCIENCE IN ENGINEERING MANAGEMENT (Management Science), University of Dayton, Dayton, Ohio
- BACHELOR OF SCIENCE IN ENGINEERING (Systems and Control Engineering), Case Institute of Technology (Case Western Reserve University), Cleveland, Ohio; Frank H. Neff Scholarship, Sam W. Emerson Scholarship, Dean's High Honor List, Dean's Honor List

TEACHING EXPERIENCE (FULL TIME)

- ASSISTANT PROFESSOR, Metropolitan State University, St. Paul, Minnesota (2007 to date)
 - Teach introductory and advanced courses in Computer Forensics and Computer Science, including CFS 280 Introduction to Computer Forensics, CFS 380 Digital Evidence Analysis, ICS 140 Fundamentals of Programming, ICS 340 Data Structures, ICS 311 Database Management Systems
- PROGRAM DIRECTOR AND INSTRUCTOR, Fond du Lac Tribal and Community College, Cloquet, Minnesota (2003 - 2005)
 - Developed and taught introductory and advanced courses in Computer Forensics, Computer Security, and related courses
- INSTRUCTOR, Normandale Community College, Bloomington, Minnesota (2002 - 2003)
 - Taught one year as a sabbatical replacement in computer science

MILTON H. LUOMA, JR.

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- ASSISTANT PROFESSOR OF BUSINESS ADMINISTRATION, University of Wisconsin, Superior, Wisconsin, (1995 – 2000)
 - Taught Marketing Research, Principles of Marketing, Principles of Management, Quantitative Methods for Production and Operations, Business Law

LEGAL PROFESSIONAL WORK EXPERIENCE

- ATTORNEY AT LAW, 301 Concorde Place, Burnsville, Minnesota (1982 to 2007)
 - Engaged in the private practice of law serving primarily business clients in the areas of tax law, contracts, civil litigation, and general business law

PROFESSIONAL CERTIFICATIONS

- Licensed Attorney at Law – Minnesota
- Minnesota State Bar Association – Member
- Computer Security Institute – Member
- EnCase Computer Forensics I & II Certification, Guidance Software, Inc.
- New Technologies, Inc. Computer Forensics Certification
- Oregon State University Graduate Certification in Computer Forensics
- Kroll Ontrack Certification in Electronic Discovery

RECENT REFEREED PUBLICATIONS

“Ensuring Ninoododadiwin (Harmony) in the Business Entrepreneurship Efforts of the Anishinaabe (original) People: Lessons for Everyone?” *Business Journal for Entrepreneurs*, Franklin Publishing Company, 2006; co-authored with Vicki M. Luoma, Penny Herickhoff, and Georgia Holmes.

"Artificial Intelligence and Information Retrieval in the Legal Domain: A Look to the Future", *Proceedings of 2000 Midwest Academy for Legal Studies in Business*, March 2000.

“Sexual Harassment Plaintiffs: Issues in Continuing Employment,” *Proceedings of 2000 Midwest Academy for Legal Studies in Business*, March 2000; co-authored with Vicki M. Luoma

“The First Thing We Do, Let’s Kill All the Lawyers . . . (A Survey of the Literature of the Application of Artificial Intelligence to Law,” *Proceedings of the 1997 Midwest Academy for Legal Studies in Business*, March 1997.

Luoma, V. & Luoma, Jr., M. H. (2007). Third Party Liability. *Computers & Security*.

Abstract Only

Luoma, V., Herickhoff, P., & Luoma, M. H. (2008). Readiness Test: Do they Really Work? International Conference PBL 2008, 43.

Luoma, V. (in press, 2008). Reflective Activities in an Online Course. Online Facilitator Summit.

Luoma, Jr., M. H. & Luoma, V. M. (2007). Liability for Employee computer misuse. Computer Security Institute, CMP Media LLC, 13.

Luoma, Jr., M. H. & Luoma, V. M. (2007). Employer Liability to third parties for Employee Computer Misuse. Computer Security Institute, CMP Media LLC, 13.

Luoma, V. & Luoma, Jr., M. H. (2007). Electronic Discovery Update for Management. Computer Security Institute.

Luoma, V. & Luoma, Jr., M. H. (2007). New Active Learning Techniques that will make your classes soar. Innovative Professor Conference, Austin Peay State University, 5.

Luoma, V. and Luoma, M. (2007). Employee Misuse of Computing Resources. American Academy of Legal Studies, ALSB.

Luoma, M. H. & Luoma, V. M. (in press, 2007). Computer Forensics: A New Tool in Electronic Discovery. Academy of Legal Studies, Academy of Legal Studies, 71.

Luoma, M. & Luoma, V. (2007). Retention and Deletion of Electronic Documents: A Global Perspective. Computer Security Institute, CSINet Sec.Com.

Luoma, Jr., M. H. & Luoma, V. (2007). Discovery of Electronic Documents: What every organization needs to know. Computer Security Institute, CSINet, 17.

Luoma, V., Luoma, Jr., M. H. , & Miller, C. L. (2006). Rats and Grats in Problem Based Learning: Does any of it Really Work? Marketing Management Associations 11th Annual Educators conference, Marketing Management Association.

Luoma, V. & Luoma, M. H. (2006). Creating Active Team-based Learning in D2L. Desire2Learn: UC06.

Luoma, V., Luoma, Jr., M. H. , & Luoma, V. M. (2006). Computer Forensic Analysis: Only for Large-Scale Litigation? Academy of Legal Studies.

Luoma, V. and Luoma M. (2006). Consumer Fraud and Abuse Act and Corporate Responsibility. Southern Academy for Legal Studies in Business.

Luoma, V. and Luoma, M. (in press, 2006). How to Build your eDocument Management Team: A Step-by-Step Approach. CSI NetSec 2006.

Luoma, V. & Luoma, Jr., M. H. (2006). Active Learning Techniques for Online Learners. Third Annual Online Facilitator Summit , 3 (1), Brenau Online College.

Herickhoff, P. & Luoma, V. and Luoma, M. (2005). Electronic Discovery: The New Management Challenge. Academy of Legal Studies.

Luoma, V. and Luoma, M. (2005). No Learner left Behind: Problem Based Learning. Minnesota Wireless and Teaching Technology 2005.

Luoma, V. and Luoma, M. (2005). Ethics as seen through Milton Friedman's eyes. Harold Mac McFarland Ethics and Critical Thinking Conferences.

Luoma, V. (2005). The Never Ending Problem: Learner-Centered Team Problem. AACSB.

Luoma, V. (in press, 2005). Computer Forensics and Electronic Discovery the New Management Challenge. Computer Security Institute.

Luoma, V. & Luoma, M. (2005). Abuse of the Computer Fraud Abuse Act. Academy of Legal Studies.

Luoma, V. (2005). Computer Forensics and E Document Retention: Management Challenge. Computer Security Institute 32nd Annual Conference.

2.

Presentation of Refereed Papers
International

Luoma, V. & Luoma, Jr., M. (2007, March). American Idol Contract: The Keith Beukelare Experience, Like a. Accepted for Midwest Academy of Legal Studies in Business, Chicago, Illinois.

Luoma, V., Luoma, Jr., M. H., & Miller, C. (2007, March). Problem Based Learning: How Well Does It Really Work? Accepted for Midwest Academy of Legal Studies in Business, Chicago, Illinois.

MILTON H. LUOMA, JR.

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Luoma, V., Luoma, Jr., M., & nentl, N. (2007, March). The Blackboard v. Desire2Learn Online War: Implications for the Future. Accepted for Midwest Academy of Legal Studies in Business, Chicago, Illinois.

Luoma, V., Luoma, Jr, M. H., & Miller, C. (2006, March). People, Ethics, Insurance, Terrorism, Patriotism & War: Strange Dichotomies. Presented at Midwest Academy of Legal Studies in Business, Chicago, Illinois.

Luoma, V., Luoma, Jr., M. H., & Herickhoff, P. (2006, March). Spoilation and Electronic Discovery Proceed at Own Risk. Presented at Midwest Academy of Legal Studies in Business, Chicago, Illinois.

National

Luoma, V. & Luoma, Jr., M. H. (2007, November). Problem Based Learning adapted to online classes. Accepted for Promoting Deep Learning: Cultivating Curiosity, Creativity, and Engagemet in College, Minneapolis, Minnesota.

Regional

Luoma, V.M. & Luoma, Jr., M. H. (2006, May). Problem Based Learning in an Online Format. Presented at Minnesota E-Learning Summit, Minneapolis, Minnesota.

Luoma, V. & Luoma, Jr., M. H. (2006, May). Active Learning for Active Learners on Online. Presented at Metropolitan University Best Practices Conferences, St. Paul, Minnesota.

Michael V. Stein: Curriculum Vitae

Address:

Metropolitan State University
Department of Information and Computer Science
730 Hennepin Ave.
Minneapolis, MN 55403
612-659-7152 (O); 612-802-6727 (C)
Michael.stein@metrostate.edu

Education:

University of Minnesota, Minneapolis, MN. (1992-1999)

- PhD in Computer Science, August, 1999, advisor Dr. John Riedl. Thesis title: *Interconnecting Annotations of Software Artifacts*. Passed Written Preliminary Exam September 1994 with "High Pass" in major area (Software Systems). Passed Oral Preliminary Exam June 1997. Completed all coursework for the PhD. Coursework emphasized software engineering, operating systems, and networks. Overall GPA 4.0/4.0.
- MS in Computer Science, 1995, advisor Dr. John Riedl. Thesis title: *The Effects of Transport Method on the Quality of Audioconferences with Silence Deletion*.

Illinois Institute of Technology, Chicago, IL. (1985-1986)

Introductory courses in computer science. No degree pursued. GPA 4.0/4.0.

Northwestern University, Evanston, IL (1978-1980)

MS in Applied Mathematics, emphasizing probability and statistics. No thesis. GPA 3.6/4.0.

Carleton College, Northfield, MN. (1974-1978)

BA in Mathematics. GPA 3.6/4.0.

Employment:

Metropolitan State University, Minneapolis, MN (1999-present)

- **Assistant Professor of Information and Computer Science**

University of Minnesota, Minneapolis, MN (1993-1998)

- **Research Assistant:** March 1995-March 1998.
 - Performed research in software inspection under direction of Dr. John Riedl.

- Enhanced experimental system for distributed, asynchronous software inspection (AnnoSpec).
- Performed field study of software inspection at ICEM Systems, GmbH using AnnoSpec experimental system that I enhanced while working with Dr. Riedl and ICEM Systems, GmbH.
- Supervised undergraduate researcher who helped with this research.
- **Teaching Assistant:** Department of Computer Science, September 1993 - June 1998 (occasional).
 - Instructor for CSci 3101, *Introduction to Computer Programming with Fortran*, four times (1993-1995). Delivered all lectures, assigned grades, supervised teaching assistants.
 - Instructor for CSci 5103, *Operating System Theory*, Spring 1998. Delivered all lectures, assigned grades, supervised teaching assistants.

Bell Laboratories, Naperville, IL. (1980-1991)

- **System software development/architecture:** Developed system software (C and Fortran languages) for switching systems. Worked on system architecture for ISDN and wireless communication systems.
- **System performance analysis:** Analyzed performance of switching systems. Measured processor performance at soft real-time tasks, developed algorithms to estimate system performance, tuned system software to enhance performance.
- **Project management/marketing:** Project manager and technical liaison to a large customer for a specific switching project.
- **Community service:** Co-organized volunteer effort to teach at Olive-Harvey Community College, Chicago, IL. Volunteers tutored students, provided career counseling, and taught occasional class sessions.

Northwestern University, Evanston, IL. (1979-1980)

- **Teaching Assistant:** Ran problem sessions, graded papers and exams for introductory courses in the Mathematics Department.

Publications:

- Stein, M.V. *Student Effort in Condensed and Semester-Long Capstone Project Courses*. Consortium for Computing Sciences in Colleges Central Plains conference (CCSC-CP '03), April 2003.
- Stein, M.V. *Mathematical Preparation as a Basis for Success in CS-II*. Consortium for Computing Sciences in Colleges Central Plains conference (CCSC-CP '02), April 2002.

- Stein, M.V. *Using Large vs. Small Group Projects in Capstone and Software Engineering Courses*. Consortium for Computing Sciences in Colleges Central Plains conference (CCSC-CP '02), April 2002.
 - Stein, M. V.; Riedl, J. T.; Heimdahl, M. P. E. *Interconnecting Annotations within Software Systems*. 22nd International Computer Software and Applications Conference (CompSac'98), August 1998.
 - Stein, M. V.; Riedl, J. T.; Harner, S. J.; Mashayekhi, V. *A Case Study of Distributed, Asynchronous Software Inspection*. 19th International Conference on Software Engineering (ICSE'97), May 1997.
 - Berger, A. W.; Kent, J. S.; Stein, M. V. *Preventing Overload and Verifying Link Stability in an Implementation of the DPNSS Layer 2 Protocol*. IEEE Global Telecommunications Conference (Globecom'89), November 1989.
-

Short Papers:

- Stein, M. V.; Heimdahl, M. P. E.; Riedl, J. T. *AnnoSpec: A Tool to Enhance Visibility of Annotations During Software Inspection*. Automated Software Engineering conference (ASE'99), September, 1999.
- Stein, M. V.; Riedl, J. T.; Harner, S. J.; Mashayekhi, V. *Experiences with Distributed, Asynchronous Software Inspection*. Computer Supported Cooperative Work conference (CSCW'96), November, 1996.

Paul Hyde

Programix Incorporated
www.programix.com

OBJECTIVE

Seeking an exciting position on a Java-centric project acting as a software architect, hands-on developer, and mentor to junior Java developers. Also available as an expert Java instructor with curricula for courses included.

SUMMARY

- **13 years** of *intensive* Java-specific experience.
- **18 years** of professional software development experience.
- Author of the book: *Java Thread Programming*.
- Adjunct Professor of Computer Science.
- **Sun Certified Web Component Developer** for **J2EE**.
- **Sun Certified Programmer** for Java 2 Platform.
- 13 years of part-time (evening) and some full-time training experience.
- Developed curricula and taught: Core Java, JDBC, Threads, XML, Servlets/JSP, EJB, Java Web Start, JavaEE, Struts, Swing, UML, Object Oriented Design Patterns, and HTML classes.
- Author of SimpleServlets open-source library.
- Author of ProgramixGenericLib open-source library.
- 12 years as President and Senior Consultant for Programix Incorporated.
- **Master of Science in Computer Science.**
- **Bachelor of Science in Electrical Engineering.**

SKILL SUMMARY

Java Certifications

- Sun Certified **Programmer** Java 2 Platform **1.4** [SCJP - Aug 22, 2003]
- Sun Certified **Web Component Developer** Java 2 Platform, Enterprise Edition [SCWCD - Aug 21, 2003]
- Sun Certified **Programmer** for the Java 2 Platform [SCJP – Feb 8, 1999]
- Sun Certified Java **Programmer** 1.1 [SCJP – May 5, 1998]
- Sun Certified Java **Programmer** 1.0 [SCJP – May 2, 1997]

Java Technologies

- Java Web Start – JNLP
 - standalone applications
 - n-tier C/S applications
- Java Servlets
- JavaServer Pages – JSP
 - Struts
 - JSTL
 - Custom Tag development
- JDBC
- XML (SAX, DOM, JDOM)
- Enterprise JavaBeans – EJB
- JNDI
- Multithreaded applications
- RMI
- Swing toolkit
- Custom GUI Component design in AWT & Swing
- TCP/IP Sockets
- Java Applets
- Collections API
- Java2D API
- Reflection
- Printing (1.2)
- SmartCard technology
- Java EE and Java SE
- JUnit

Other Languages

- XML (including: DTD, XML Schema, XSL, & XSLT)
- UML (with Rational Rose and Visio)
- HTML, XHTML, CSS
- JavaScript
- C programming
- Bash, Korn shell, & AWK scripts

Databases

- PostgreSQL
- Oracle (including using Java *inside* the database)
- Microsoft SQL Server
- Sybase (SQL & Transact-SQL)
- Informix (SQL, 4GL, ESQ/C, & SPL)
- hsql (Hypersonic-SQL)

Design

- Software design and processing distribution
- Database design and data modeling
- Graphical User Interface design

Operating Systems

- Linux – Kubuntu, Ubuntu, Fedora
- Solaris Unix and other Unix flavors
- Windows 95/98/NT/2000/XP/Vista

Tools

- BEA WebLogic Server
- JBoss
- Apache Tomcat
- Jetty
- EntireX
- Apache Ant (including writing custom tasks)
- Apache Xerces, Xalan
- Rational Rose
- Eclipse
- JBuilder (incl. WebLogic Ed.)
- Visual SlickEdit
- JCreator
- Vim, Vi
- CVS, WinCVS, SmartCVS, CVSNT
- Subversion
- MKS Source Integrity
- Visual SourceSafe
- JClass libraries
- JThreadKit
- SimpleServlets
- ProgramixGenericLib
- Dash-O Pro
- JProfiler

BOOKS PUBLISHED

Java Thread Programming

- Published by Macmillan Computer Publishing, August 1999.
- Comprehensive coverage through Java 2 - 510 pages, over 19,000 copies sold.
- Book has received 25 perfect 5 out of 5-star user ratings on Amazon.com.

EXPERIENCE

Programix Incorporated, Plymouth, MN

July 2007 – present

Java Consultant and Mentor, Garmin – Digital Cyclone, Minnetonka, MN

- Worked on the architecture, design, and development of the *Image Server 2* project for generating images for My-Cast and Pilot My-Cast on cell phones. This system is used to visually depict weather-related and aviation-related data on generated maps including sprite animated hurricane forecast tracks, Doppler radar images, graphically drawn National Weather Service warnings, watches, and advisories, satellite images, and much more. There is extensive use of the Java 2D API for rendering images, use of map projections to mathematically transform latitude and longitude data into x/y space for the generated images, advanced multithreading and concurrency control, dynamic generation of maps, and the creation of tile base imagery to allow for efficient user panning.
- Designed and implemented a Java Web Start status and administration client and a modular framework to facilitate the decoupling and addition of other modules. Designed and developed a high-speed ImageIndexer which is a RGB to byte-indexed BufferedImage converter that picks exact colors in the destination color model and avoids dithering. Designed and developed advanced curve fitting and specialized drawing along the curve.
- The architecture consists of cell phone clients applications communicating over HTTP to the servlet-based Image Server 2. Image Server 2 reads and processes data files and data from internal servers to produce images. In addition, there is a Swing-based Java Web Start (JNLP) client that serializes objects over an HTTPS connection to servlet-base middle tier for remote administration and status.
- Used Java EE and Java SE technologies: Java 2D API, JNLP, Java Web Start, Swing, Object Serialization, XML, Java Servlets, JUnit, advanced multithreading; ProgramixGenericLib toolkit; SimpleServlets framework; UML diagrams for design; Eclipse 3.4 for editing; CVS, WinCVS, SmartCVS, and Subversion for version control; and Ant for builds. Team used Agile software development techniques.

Programix Incorporated, Plymouth, MN

July 2004 – June 2007

Java Consultant and Mentor, Minnesota Department of Human Services, St. Paul, MN

- Architected, designed, and led development of the *MEC² Integration Project* for childcare assistance. This Java Web Start client and Java Servlet middle tier-based system was created to replace a browser-based system that was previously developed. This system is used by both county and state workers in Minnesota to determine eligibility for child care assistance, fight fraud by both families seeking assistance and by childcare providers, and to streamline the process from initial family application through provider payment.
- The architecture consists of a Swing-based Java Web Start (JNLP) client that serializes objects over an HTTPS connection to a Java Servlet middle tier. The middle tier connects through EntireX a mainframe running Natural code which talks to an Adabas database that contains both this new child care information and information on other Department of Human Services programs.
- Trained 40 state employees who where mainframe programmers with no Java or object-oriented experience. These employees were trained in Java, UML, JDBC, XML, Servlets and JSP's, and Java Web Start part-time during normal business hours over several months. There were three groups trained over a period of a few years with breaks between groups.
- Mentored the newly trained state employees in Java as they developed the new child care assistance application.
- Encouraged the use of open-source tools to save the taxpayers' money, including the use of Eclipse, Ant, Tomcat, Linux, CVS, and Subversion.
- Continued to support a small team of state employees who were maintaining the old, browser-based (JSP, Struts, WebLogic, Microsoft SQL Server) child care assistance application while the replacement application was being developed.
- Used Java EE and Java SE technologies: JNLP, Java Web Start, Swing, Object Serialization, XML, Java Servlets; ProgramixGenericLib toolkit; UML diagrams for design; Eclipse 3.0, 3.1, and 3.2 for editing; CVS, WinCVS, SmartCVS, CVSNT, and Subversion for version control; and Ant for builds.

Metropolitan State University, St. Paul, MN

August 2004 – present

Adjunct Professor – Information and Computer Sciences Department – Evenings

- Taught ICS 462 – *Operating Systems* semester-long course.
- Taught ICS 492 – *XML and Java* three-evening seminar.

Programix Incorporated, Plymouth, MN

March 1998 – present

Java Instructor – Evening, Weekday, and Weekend classes, Twin Cities, MN

- Instructor for both Java Standard Edition (Java SE) and Java Enterprise Edition (Java EE) training courses.
 - Java SE courses: *Intro to Java (Java I)*, *Advanced Java (Java II)*, *Core Java – Part A*, *Core Java – Part B*, and *Threads and Java*.
 - Java EE courses: *Database Access with JDBC, XML and Java*, *Java Servlets and JSP*, *EJB – Enterprise JavaBeans*, and *Java Web Start & Advanced n-tier Development* classes, *Java EE Compressed*, *Struts*.
- Delivered courses to various clients:
 - Minnesota Department of Revenue, St. Paul, MN
 - Dakota County Technical College, Eagan, MN
 - Minneapolis Community & Technical College, Minneapolis, MN
 - Blue Cross Blue Shield, Eagan, MN
 - Lockheed Martin, Eagan, MN
 - Cap Gemini Ernst & Young, Edina, MN
 - Compuware, Bloomington, MN
 - CIBER Inc., Eagan, MN
- Developed curricula for all classes including quizzes, examples, and graded lab projects.
- Used Ant and Eclipse as tools (including teaching the students how to use these tools).
- Consistently received outstanding student evaluations.

Programix Incorporated, Plymouth, MN

October 2003 – June 2004

Java Consultant and Mentor, Minnesota Department of Human Services, St. Paul, MN

- Participated in the development of the MEC² childcare assistance project. This J2EE and browser-based system is used by both county and state workers in Minnesota to determine eligibility for child care assistance, fight fraud by both families seeking assistance and by childcare providers, to streamline the process from initial family application through provider payment, and much more.
- JSP's, Struts, internally developed Custom Tag Libraries, JSP Standard Tag Libraries (JSTL), HTML, and JavaScript are used for the pages viewed by a browser-based client.
- BEA WebLogic Server is used on the middle tier where EJB's, JDBC, and SQL are used to talk to Microsoft SQL Server.
- Java applications utilizing Java I/O, JDBC, and SQL are used to do batch processing of data feeds into and out-of the system. Encouraged an eventual migration to using XML for these data files.
- Acted as a designer and a developer to track down and fix tough bugs and to add enhanced functionality and new features throughout the system.
- Acted as a mentor to four State of Minnesota employees (with no Java experience) to educate them on the Java technologies used in this application and to cultivate them into full Java developers capable of supporting and extending the system.
- Enabled the four state employees to take over full application responsibility—including the ability to add new functionality—from an expensive outside consulting company resulting in huge cost-savings for the State of Minnesota.
- Encouraged the migration to open-source tools to save the taxpayers' money, including the use of Eclipse instead of JBuilder, CVS and WinCVS instead of Microsoft Visual SourceSafe, and JBoss instead of WebLogic.
- Used J2EE technologies: JSP's, Struts 1.0 and 1.1, custom JSP tags, JSTL, HTML, JavaScript, Servlets, and EJB's running on BEA WebLogic; SimpleServlets toolkit; ProgramixGenericLib toolkit; JDBC and SQL to talk to Microsoft SQL Server; UML diagrams for design; Collections API; JBuilder WebLogic Edition and Eclipse 3.0 for editing; WinCVS, SmartCVS, CVSNT for version control; Microsoft Visual SourceSafe for version control; Ant for builds; Real VNC for support of telecommuting developers.

Programix Incorporated, Plymouth, MN

September 2002 – November 2003

Java Consultant, WACS, Brooklyn Park, MN

- Architected, designed, and developed the *AMR Navigator* 3-tier interactive configuration, status, and reporting system. This system is used by electric and gas utility companies to monitor product usage, infrastructure events (like power outages), live polling of individual meters, and many more tasks to add efficiency to the utility companies' operations and demand planning.

- Java Web Start was used on the client tier to build a highly interactive client which utilized multiple threads for simultaneous background tasks, custom graphical components, and the HTTP protocol to serialize objects up to (and back from) a Java Servlet middle-tier.
- Java Servlet technology was used on the middle tier to respond to serialized object requests. The servlet had extensive security and server-side session storage to streamline communication with the client tier.
- JDBC was used by the servlet to communicate with an Oracle database.
- Used Java Web Start (JNLP technology); J2EE Servlets running on Tomcat, JRun and BEA WebLogic; JDBC and SQL to talk to Oracle; Java stored procedures inside the Oracle database; UML diagrams for design; Swing; Reflection API; Serialization; Collections API; TCP/IP socket networking; Java 2D API for printing; extensive multithreading; JClass libraries; Vim and Eclipse for editing; CVS and WinCVS for version control; Ant for builds.

Programix Incorporated, Plymouth, MN

July 2000 – November 2006

Chief Architect, Designer, & Developer for JThreadKit

- Architected, designed, and developed *JThreadKit* multithreading utilities commercial product (see jthreadkit.com). JThreadKit is a collection of Java API's which greatly accelerate the development of solid, thread-safe applications.
- Designed and developed the all classes and interfaces in the library.
- Architected, designed, and developed the custom *software key* system that allows for developers to use a fully functional version of JThreadKit for up to 30 days. After 30 this free trial period, the libraries go into a lockout mode until a purchased software key is input. After the software key is validated, the libraries return to a fully operational mode.
- Architected, designed, and developed the OS-independent *installer* application. Developers download a single executable jarfile containing the installer and all of the supporting libraries and documentation. Once downloaded, this jarfile is simply run by double-clicking the file. The installation process asks questions, requires the acknowledgement of the license agreement, and optionally accepts a license key or installs for a 30-day evaluation.
- Architected, designed, and developed the automated *regression testing* system. This Swing-based graphical module runs thousands of regression tests in parallel using multiple threads and helps ensure the quality of each release of JThreadKit.
- Architected, designed, and participated in the development of a *site builder* application that is used to regenerate the web site pages quickly and efficiently while adding the header, trailer, and navigation bar. This site builder tool runs in two modes, one mode to generate the web site for upload to the web server, the other mode to generate a portion of the site for the documentation that gets put on the developer's machine during the installation process.
- Handled the business-side of JThreadKit including marketing, advertising, and the outsourced connection for the e-commerce purchase of software keys.

Programix Incorporated, Plymouth, MN

January 2001 – November 2002

Java Consultant, Simplex Technology, Culver City, CA

- Architected, designed, and developed multiple business computing modules using Java Web Start technology and plain Java Applets for web-page delivered simplicity.
- Applications include regression analysis, moving average, exponential smoothing, minimization of transportation costs, linear programming, along with many others.
- Created client-side graphs of data and results using Java2D API.
- Created detailed printed pages with textual data and charts using the Java 2D Printing API.
- Used Java Web Start (JNLP) technology, Swing, and Visual SlickEdit.

Programix Incorporated, Plymouth, MN

June 2001 – December 2001

Java Consultant, Circus Software, Edina, MN

- Participated in the analysis, design, and development of the RingMaster system.
- Architected, designed, and developed the client side of this n-tier product, which is a Swing-based application that makes extensive use of the drag-and-drop idiom.
- Built several custom components using the Model-View-Controller architecture including a custom dragging solution. Explored use of Java Web Start and EJB technologies.
- Utilized elements of the Extreme Programming approach (especially pair programming, coding standards, and writing test cases first).
- Used Java Web Start (JNLP technology); UML diagrams in Visio for design; Swing—extensively; Reflection API; Serialization; Collections API; multithreading; JClass libraries; Vim and Visual SlickEdit for editing; CVS and WinCVS for version control.

Programix Incorporated, Plymouth, MN
Java Consultant, Notiva, Bloomington, MN

October 2001 – November 2001

- Participated on the architecture and design of Notiva's business-to-business system for streamlining the reconciliation of invoices, purchase orders, and other billing processes.
- Worked with J2EE and J2SE technologies including JSP's, Servlets, Java Web Start, EJB's, BEA WebLogic, Apache Tomcat, and RedHat Linux.

Programix Incorporated, Plymouth, MN
Java Instructor, Minnesota Midrange Solutions, Plymouth, MN

June 2001 – September 2001

- Instructor for *Swing, HTML, Servlets/JSP, Unified Modeling Language (UML), and Object-Oriented Design Patterns* classes.
- Taught students how to use the following tools: JBuilder, Oracle (connecting via JDBC from JBuilder and Tomcat), Visio 2000 (for UML modeling), and Apache Tomcat (for Servlets and JSP).
- Received excellent student evaluations.

Programix Incorporated, Plymouth, MN
Java Consultant, Digital Cyclone, Minnetonka, MN

May 2000 – March 2001

- Participated in the development of the My-Cast.com local weather forecasting system.
- Worked extensively with Java 2 including threads, TCP/IP sockets, Swing, Java 2D, Java Servlets, and JDBC on the Solaris Unix platform along with the Oracle RDBMS.
- Designed and built a high-availability middle tier that cached *hundreds* of megabytes of data. This data was refreshed at 3-hour intervals. A key element of the design was to recycle large data structure objects to ease the burden on the garbage collector (without the recycling, garbage collection would sometimes freeze up the application for long periods of time - up to ten minutes!). This server was multithreaded and was able to quickly and safely handle simultaneous data requests coming in over TCP/IP socket connections.
- Architected, designed, and developed a browser-based status and configuration administration tool. This Java Servlet-based tool generated forms and HTML pages used to convey the current status of various servers behind the scenes in the My-Cast system. The servlet also facilitated the on-the-fly changing of some configuration parameters of the servers being monitored.
- Architected, designed, and developed a browser-based load-testing tool. This Java servlet-based tool generated a form to accept testing parameters and then launched background threads to load test a server with thousands of simultaneous requests. The timing results of the load testing were calculated and displayed by the servlet.
- Used J2EE Servlets running on Tomcat and iPlanet; JDBC and SQL to talk to Oracle; extensive multithreading and TCP/IP networking; Swing; Reflection API; Serialization; Collections API; Java 2D API; Sun's Solaris Unix for the development environment, Vim for editing; CVS for version control.

Programix Incorporated, Minneapolis, MN
Java Consultant, Sylvan Prometric, Edina, MN

January 1998 – May 2000

- Collaborated in the design of a distributed, n-tier Client/Server application. Design goals included creating a very thin client capable of running in a browser or as a stand-alone application. Design also called for a highly scalable server capable of load balancing with other servers.
- Worked extensively with Java 1.1 and 1.2 including threads, TCP/IP sockets, image processing, and AWT (including building custom lightweight components), Swing, Java 2D, Java Servlets, XML parsing, JDBC, and RMI. Explored early EJB technologies. Explored early Java Web Start technology.
- Used Object Oriented Analysis (OOA) and Object Oriented Design (OOD) techniques using Unified Modeling Language (UML) and Rational Rose.
- Used JBuilder, Kawa, Vi, Vim, MKS Source Integrity, and Sybase RDBMS.
- Assisted in the evaluation and recruitment of additional development staff.

Programix Incorporated, Minneapolis, MN
Java Consultant, TECo Incorporated, Edina, MN

May 1997 – January 1998

- Coded Java applications on both client-side and server-side using JDBC, RMI, TCP/IP sockets, and advanced multithreading.
- Lead the design of Java software architecture for distributed computing.

AT&T and Lucent Technologies, Whippany, NJ

February 1995 – January 1997

Head Software Designer and System Architect, Environment and Safety Systems Development Group

- Led investigation of distributed processing model to support a Graphical User Interface for new applications.
- Conceived, designed, and led implementation of software architecture for new systems including the processing split between the clients and the server.
- Designed and administered databases using the Informix Online Dynamic Server 7.1.
- Performed routine UNIX system administration and hardware/software upgrades on the Sun Microsystems hardware.
- Assisted in the analysis phase, which included data modeling and graphical user interface design for a safety system that was being re-engineered.
- Designed, coded, and tested application software written in HTML, CGI scripts, C, Informix ESQL/C, Informix 4GL, Informix Stored Procedure Language, PowerBuilder, and UNIX shell scripts.
- Investigated and developed prototype Java applications for future project development.
- Led development team in software engineering principles.

The Chubb Institute, Parsippany, NJ

December 1995 – February 1997

Client/Server Curriculum Instructor - Evenings

- Instructor for Sybase, UNIX, and C courses in the Client/Server curriculum.
- Developed 250-page student guide for Sybase class.

AT&T, Whippany, NJ

July 1992 – January 1995

Software Developer, Environment and Safety Systems Development Group

- Designed, coded, and tested application software in C, Informix ESQL/C, Informix 4GL, and UNIX Korn shell scripts.
- Conceived, proposed, and led migration of applications from Amdahl mainframe to a Sun Microsystems SPARCserver 1000 for a significant cost savings and performance improvement.
- Configured, assembled, and cutover to Sun 1000 running the Solaris 2.4 UNIX System V Release 4 operating system.
- Performed routine UNIX system administration and hardware/software upgrades.

AT&T, Newark, NJ

July 1990 – June 1992

Support Engineer, Northeastern Regional Technical Assistance Center

- Provided 24-hour support of 5ESS Digital Switching System to NYNEX, Southern New England Telephone, Rochester Telephone, and AT&T Installation. Worked to provide customer approved solutions. Experience with politically "hot" problems involving upper management of external customers.
- Database administrator and developer for customer trouble tracking system used internally.

EDUCATION

- **Master of Science in Computer Science**, Stevens Institute of Technology, Hoboken, NJ, May 1994.
- **Bachelor of Science in Electrical Engineering**, Lehigh University, Bethlehem, PA, June 1990.

AFFILIATIONS

- Member - Institute of Electrical and Electronic Engineers (IEEE)
- Eta Kappa Nu - Electrical Engineering Honor Society
- Tau Beta Pi - Engineering Honor Society
- Phi Eta Sigma - Freshman Honor Society

REFERENCES

- Available upon request

Sue Crane Fitzgerald, Ph.D.

Metropolitan State University

Work: (651) 793-1473

Email: sue.fitzgerald@metrostate.edu
URL: <http://faculty.metrostate.edu/fitzgesu/>
Home: (612) 824-1701

WORK EXPERIENCE

Metropolitan State University, Minnesota

1996 - present

Professor of Computer Science (2004 – present)
Department Chair (1996-2002)
Associate Professor of Computer Science (1996-2004; tenured 1999)

Major accomplishments: Proposed and implemented bachelor of science degree program in computer science (1998). CIS curriculum redesign (1998). Introduced standards for admission to computer-related degree programs during period of rapid growth. Managed department of 4 full-time faculty members, approximately 25-30 part-time faculty members, 1 clerical staff member and 7 student tutors. Managed \$700,000 budget. Purchased departmental equipment and software for university labs. Hired full-time and part-time faculty members. Scheduled classes and faculty. Handled student complaints. Formed technical advisory committee composed of representatives from area businesses. Strengthened advising process by clarifying policies, establishing a standardized transcript evaluation process, improving written materials, forming and advertising an advising team, and meeting regularly with advising staff. Reestablished tutoring service for beginning programming students. Formed liaison with internship office.

Curriculum development: Contributed to international curriculum standards (CC 2001). Wrote proposal for new bachelor's degree program in computer science. Developed articulation agreements with seven metropolitan area community and technical colleges. Reviewed new undergraduate programs. Proposed graduate course in web services and service-oriented architecture. Organized and completed planning for conversion from quarters to semesters.

Teaching responsibilities: Distributed operating systems (graduate-level, 2008-present); computer security (2007-present); HCI design and usability; client-side web programming; server-side web programming (2003-present); web services (graduate-level, 2007-present); information issues/politics and technology (graduate-level, 2003); introductory programming, algorithms, data structures, organization and architecture, and emerging trends in technology (1996-2002); evaluation of prior learning (1996-present); undergraduate independent study projects (occasional); graduate research projects (2007-present). Converted programming sequence to use Java language (1998).

Online: Created a four-hour online security module, *The Ten Domains of Information Security*, for Minnesota State Colleges and Universities' Employee Security Training Program.

Research activities: Ongoing focus on undergraduate computer science education research, specifically novice programming and debugging. Organized and led research group with interests in multi-institutional, multi-national studies of novice programmers (2005-present). Organized and co-led ITiCSE working group which developed a video repository for novice debuggers (2007). Organized and co-led

ITiCSE working group which studied novice programmer reading and tracing skills (2004). Participated in NSF-sponsored Bootstrapping Research in Computer Science Education Workshop (2002-2003). See also publications and presentations listed below.

Service activities: Co-chaired SIGCSE Technical Symposium (program committee co-chair, 2008; symposium co-chair, 2009). Co-chaired SIGCSE Doctoral Consortium for two years. Served on College of Arts and Sciences curriculum committee; academic appeals committee; math education search committee. Represented faculty at bi-annual faculty union assembly. Evaluated transcripts for all incoming computer science and computer information systems majors (1996-2008). Chaired academic programs committee for two years (reviewed all new undergraduate programs). Served on university academic steering committee for three years (reviewed all new undergraduate courses). Served three years on university-wide faculty council. Chaired monthly college faculty meetings and college tenure committee (two years). Served as officer of the board of directors for the Consortium for Computing in Small Colleges. Served on steering committee for regional Consortium for Computing in Small Colleges: Central Plains Conference. Served on College of Arts and Sciences Curriculum Committee (reviewed new courses proposed by the college) and university-wide Technology Committee. Chaired two computer science searches, one computer forensics search, and served on many other search committees.

Barbados Community College, Barbados

August, 2002 – May, 2003

Visiting Fulbright Scholar

Major accomplishments: Received 9-month Fulbright grant to teach at Barbados Community College. Reviewed computer studies curriculum and recommended changes. Interviewed students as part of an international, multi-site project to investigate "first competency" programmers' conceptions and constructs of programming. Represented the Community College on national television. Met with industrial advisory board. Taught faculty workshops on UML, C++, and C. Taught programming courses in C++, C, and Pascal. Located free and discounted software upgrades for the college.

Rockhurst College, Kansas City, Missouri

1989 –1996

Assistant Professor of Computer Science (tenured 1995)

Teaching responsibilities: Taught undergraduate courses in operating systems; networking theory; object-oriented design and programming using C++; systems analysis and design; senior software practicum; database management systems; theory of programming languages; algorithms and data structures; computer science concepts; introduction to programming; and computer literacy for non-majors. Directed undergraduate research and independent study projects in networking; simulation; object-oriented design; and client/server software development. Developed extensive course materials for computer literacy and introductory computer science labs.

Research activities: Explored the nature and implications of self-similar (fractal) data traffic patterns on high speed networks via matrix exponential modeling and simulation studies (doctoral research). Performed simulation studies on a multi-channel demand assignment protocol for high speed networks and investigated the effects of bursty traffic and buffering on packet delay, packet loss and channel utilization. Directed student research project which resulted in a poster presentation at a national conference. Designed and performed a research experiment in teaching effectiveness to see whether computer literacy students were best served by working individually or in groups.

Service activities: Served as board member of the Consortium for Computing in Small Colleges from 1992 to 1997 including one term as president. Started two new annual regional conferences. Served as program chairman for conferences several times. Refereed papers for international journals and conferences. Planned, organized and implemented a new recruiting event for high school students. Scripted and directed a video for recruiting science students. Advised transfer students and continuing computer science majors. Administered departmental local area network. Supervised departmental secretary. Supervised 8 part-time student workers. Wrote 10-year accreditation report for North Central

Accreditation Board. Served on these committees: North Central Accreditation Committee; Master's Degree for Teaching Science Task Force; Executive Committee of the Faculty General Assembly; Steering Committee for the Executive Committee of the Faculty General Assembly; Student Welfare Committee; Hawk Review Board (student paper); search committees for science education, math, computer science and physics faculty members.

Independent Consulting, Kansas City, Missouri

1989 – 1996

- 5/93 Reviewed manuscript for Nell Dale's book, Abstract Data Types: Specifications, Implementations, and Applications, for Heath Publishing.
- 9/91 Wrote comparative review of new textbook by McArthur and Crawley, Structuring Data with Pascal, and Helman, Veroff and Carrano's text, Intermediate Problem Solving and Data Structures: Walls and Mirrors for Prentice-Hall publishers.
- 6/91 Edited Adrian Tang's book manuscript "Open Networking with OSI."
- 7/90 Installed VMS and third party software for process control at Proctor and Gamble.
- 6/90 Developed database for Kansas City Committee for UNICEF.
- 4/90 Developed and taught short course on dBASE III+.
- 10/89 Taught non-credit course in C programming at DST Systems, Inc.

St. Edward's University, Austin, Texas

1987 – 1989

Computer Science Faculty Coordinator (1988-1989)
Assistant Professor of Computer Science (1987-1989)

Responsibilities: Coordinated activities of 4 full-time, 1 part-time and 3 adjunct Computer Science faculty members. Accomplishments included decisions on curricular issues, proposal of new Master's degree program in Computer Science and equipment purchases. Taught undergraduate courses in operating systems; software engineering; database management systems; C; algorithms and data structures; 8088 family assembly language; and COBOL. Served on university-wide high technology planning committee. Coordinated funding for new academic multi-user computer. Wrote 5 year self-study report. Wrote review of department for university-wide planning committee.

Park College, Austin, Texas

1986 – 1987

Adjunct Instructor

Responsibilities: Taught undergraduate courses in operating systems; IBM 370 assembly language; and introduction to computer science.

Schlumberger Well Services, Austin, Texas

1984 – 1987

Senior Project Engineer and Group Leader
Development Engineer

Responsibilities: Managed group responsible for failure detection, real-time reconfiguration of system in failure modes, diagnostics and device-level programs. Designed hardware and software architecture for new oil well logging system. Wrote design proposals. Designed and programmed at system level. Wrote device drivers for real-time oil well logging system. Wrote design documentation.

Iowa State University Computation Center, Ames, Iowa

1980 – 1984

Manager, Microcomputer Services
Systems Programmer

Management responsibilities: Set up and managed user services for microcomputing at Iowa State University. Established a Microcomputer Product Center containing various microcomputers and associated software for demonstrations to and examination by faculty, staff and students. Interviewed, hired and supervised 3 full-time staff members and 30 student workers. Designed and presented

microcomputer short courses, as well as training sessions for student workers.

Development responsibilities: Designed and implemented software support tools for engineering maintenance lab. Programmed a locally designed 6502-based microcomputer. Developed tools including an EPROM burner, a debugger, board diagnostics, downloaders and floppy controllers. Designed and implemented software and development tools for a special purpose communications board utilized by front-end processors for NAS AS/6 mainframe and four VAXes. Wrote debugger and cross-assembler. Wrote database applications for repair and maintenance records and parts inventories. Designed and implemented computer-aided instruction software for Texas Instruments Speak & Spell and TI 99/4. Project included research work on experimental hardware.

Des Moines Area Community College, Ankeny, Iowa

1981

Instructor

Responsibilities: Taught courses in data structures; COBOL; and introduction to data processing.

Hewlett-Packard, Sunnyvale, California

1977 – 1980

Project Leader

Software Engineer

Responsibilities: Managed technical aspects of business graphics package development project. Coordinated four alpha test sites and three software engineers. Wrote software specifications. Investigated, designed and implemented software products for the HP3000, a business-oriented minicomputer. Designed and wrote non-programmer oriented tools. Released products include a business graphics package and a data entry package. Organized bi-monthly technical seminars for 100 - 200 development engineers. Contributed to company graphics standardization efforts.

EDUCATION

Certified Information Systems Security Professional (CISSP), 2006-present

Ph.D., Computer Science and Telecommunications, University of Missouri, Kansas City, 1996

M.S., Computer and Electrical Engineering, Iowa State University, 1984

B.S., Computer Science, Iowa State University, 1977

PUBLICATIONS

Hanks, B., McCauley, R., Murphy, L., Fitzgerald, S., and Zander, C. Pairs Programming: A Literature Review (in progress)

Gao, F. and Fitzgerald, S. A Comparison of Chinese and American Information Systems Degree Programs (in progress).

Fitzgerald, S., Hanks, B. and McCauley, R. Collaborative Research in Computer Science Education: A Case Study, Proceedings of the 41st SIGCSE Technical Symposium, 2010 (to appear).

Thomas, L., Zander, C., Simon, B., Murphy, L., McCauley, R., Hanks, B., and Fitzgerald, S. Learning Styles: Novices Decide, Proceedings of the Fourteenth Annual ACM SIGCSE Conference on Innovation and Technology in Computer Science Education (ITiCSE 2009), Paris, France, July 6-9, 2009: 223-227.

Fitzgerald, S., McCauley, R., Hanks, B., Murphy, L., Simon, B. and Zander, C. Debugging from the Student Perspective, IEEE Transactions on Education, to appear.

Murphy, L., Simon, B., Thomas, L., Hanks, B., Fitzgerald, S., McCauley, R., and Zander, C. Saying Isn't Necessarily Believing: Influencing Self-theories in Computing, Fourth International Computing Education Research Workshop (ICER 2008), Sydney, Australia, September 6-7, 2008.

McCauley, R., Fitzgerald, S., Lewandowski, G., Murphy, L., Simon, B., Thomas, L. and Zander, C. Debugging: A Review of the Literature from an Educational Perspective, Computer Science Education: Special Issue on Debugging, 18 (2), (June 2008) (invited paper).

Fitzgerald, S., Lewandowski, G., McCauley, R., Murphy, L., Simon, B., Thomas, L. and Zander, C. Debugging: Finding, fixing and flailing, a multi-institutional study of novice debuggers, Computer Science Education: Special Issue on Debugging, 18 (2), (June 2008): 93–116.

Simon, B., Fitzgerald, S., McCauley, R., Haller, S., Hamer, J., Hanks, B., Helmick, M., Moström, J. E., Sheard, J. and Thomas, L., Debugging assistance for novices: a video repository, Annual Joint Conference Integrating Technology into Computer Science Education, SIGCSE Inroads, vol. 39, no. 4 (December, 2007): 137-151.

Carbone, A., Mannila, L. and Fitzgerald, S. Computer Science and IT Teachers Conceptions of Successful and Unsuccessful Teaching: A Phenomenographic Study, Computer Science Education, 17, 4 (December, 2007).

Lister, R., Berglund, A., Box, I., Cope, C., Pears, A., Avram, C., Bower, M., Carbone, A., Davey, B., de Raadt, M., Doyle, B., Fitzgerald, S., Mannila, L., Kutay, C., Peltomäki, M., Sheard, J., Simon, Sutton, K., Traynor, D., Tutty, J. and Venables, A. Differing Ways that Computing Academics Understand Teaching. In *Conferences in Research and Practice in Information Technology*, Vol 66, Samuel Mann & Simon, Eds. Presented at Ninth Australasian Computing Education Conference (ACE2007), Ballarat, Victoria, Australia, January 2007.

Lister, R., Adams, E., Fitzgerald, S., Fone, W., Hamer, J., Lindholm, M. McCartney, R., Moström, J. E., Sanders, K., Seppälä, O., Simon, B. and Thomas, L., A Multi-National Study of Reading and Tracing Skills in Novice Programmers, reprinted with commentary in *Annals of Research on Engineering Education* (<http://www.areeonline.org>), 2006.

Sue Fitzgerald, Beth Simon and Lynda Thomas, Strategies that Students Use to Trace Code: An Analysis Based in Grounded Theory, First International Computer Science Education Research (ICER) Workshop, Oct. 1-2, 2005, Seattle, WA.

Sanders, K., Bouvier, D., Fincher, S., Lewandowski, G., Morrison, B., Murphy, L., Petre, M., Tenenberg, J., Thomas, L., Anderson, R., Anderson, R., Fitzgerald, S., Gutschow, A., Haller, A., Jadud, M., Lister, R., McCauley, R., McTaggart, J., Prasad, C., Richards, B., Scott, T., Shinnars-Kennedy, D., Westbrook, S. and Zander, C. A multi-institutional, multinational study of programming concepts using card sort data, *Expert Systems*, vol 22, no. 3 (2005): 121—128.

Gottschalk, L., Liu, J., Dathan, B., Fitzgerald, S., and Stein, M., "Computer Forensics Programs in Higher Education: A Preliminary Study," In the Proceedings of the Thirty-sixth SIGCSE Technical Symposium on Computer Science Education, SIGCSE Bulletin, vol. 37, no. 1 (Feb. 2005): 147-151.

Lister, R., Adams, E., Fitzgerald, S., Fone, W., Hamer, J., Lindholm, M. McCartney, R., Moström, J. E., Sanders, K., Seppälä, O., Simon, B. and Thomas, L. "A multi-national study of reading and tracing skills in novice programmers," SIGCSE Bulletin, vol. 36, no. 4 (December 2004): 119-150.

Petre, M., Fincher, S., Tenenberg, J., Anderson, R., Anderson, R., Bouvier, D., Fitzgerald, S., Gutschow, A., Haller, S., Jadud, M., Lewandowski, G., Lister, R., McCauley, R., McTaggart, J., Morrison, B., Murphy, L., Prasad, C., Richards, B., Sanders, K., Scott, T., Shinnars-Kennedy, D., Thomas, L., Westbrook, S. and Zander, C., "My Criterion is: Is it a Boolean?": A card-sort elicitation of students' knowledge of programming constructs", Technical Report 6-03, Computing Laboratory, University of Kent, Canterbury, Kent, UK, June 2003. <http://www.cs.kent.ac.uk/pubs/2003/1682>.

Mengel, S., Fitzgerald, S., Knoke, P., Lee, J., McCracken, M., McGettrick, A., Murphy, M., Martínez, M., Tockey, S. and Underwood, A. "Pedagogy Focus Group 4: Professional Practices Report," primary source document for the final report of the Joint IEEE/ACM Computing Curriculum 2001 project (unpublished).

Fitzgerald, S. "Measuring Learning Outcomes in a Competency-Based CS 2 Course," In the Proceedings of the 31st Annual Small College Computing Symposium (April 16-18, 1998, Fargo, ND): 95-103.

Fitzgerald, S., Place, J. and van de Liefvoort, A. "Generating bursty random variables using Matrix Exponential distributions," Proc. ICSEE '96, SCS Simulation Series, 28 (1996): 205-8 (presented at Communication Networks Modeling and Simulation Conference (part of the 1996 Western MultiConference).

Fitzgerald, S. Modeling Self-Similar Traffic Using Matrix Exponentials, Ph.D. dissertation, University of Missouri-Kansas City, 1996.

Fitzgerald, S. and Hines, M. L. "The Computer Science Fair: An Alternative to the Computer Programming Contest." In the Proceedings of the Twenty-Seventh SIGCSE Technical Symposium on Computer Science Education (1996). SIGCSE Bulletin, vol. 28, no. 1 (March 1996): 368-372.

Place, J. and Fitzgerald, S. "Teaching Elementary Queue Theory with a Computer Algebra System." In The Proceedings of the Twenty-Sixth SIGCSE Technical Symposium on Computer Science Education, SIGCSE Bulletin, vol. 27, no. 1 (March 1995): 350-354.

Fitzgerald, S. and Place, J. "A Simulation Study of a Multi-channel Adaptive Routing Protocol." In Proceedings of Society for Computer Simulation International Conference on Simulation Engineering Education (SCS ICSEE) '95, Las Vegas NE, Jan. 15-18, 1995: 239-42.

Fitzgerald, S. and Place, J. "Using a Computer Algebra System (Maple) to Teach Elementary Queueing Theory." Journal of Computer Applications in Engineering Education, v. 3, n. 4, 65--73 (1995).

Fitzgerald, S. "Introduction to Programming Using C++ Lab Manual." Rockhurst College, 1994, 1995.

Fitzgerald, S. "A Project for a Computer Networking Course, Applying Theory to Practice." The Journal of Computing in Small Colleges, v.9, n.3, 2-6 (Jan. 1994).

Fitzgerald, S. and Caulfield, J. "Cooperative Group Learning: A Viable Strategy for Computer-Based Laboratories?" The Journal of Computing in Small Colleges, v.7, n.5, 111-121 (May 1992).

Patent pending for Object Oriented Diagnostic Supervisor as Applied to Well Logging Instrumentation Research, 1990.

PRESENTATIONS

Reflections on the Fulbright Experience, Spring Faculty Conference, Metropolitan State University, April 5, 2008.

The Fulbright Experience, Metropolitan State University, Nov. 7, 2003.

Moderator and Panelist, "The Fulbright Program: International Teaching and Curriculum Development Experiences," 34th SIGCSE Technical Symposium on Computer Science Education, Reno, NV, Feb. 21, 2003.

Panelist, Open Forum sponsored by the Metro State Student Analyst Club, April 8, 2002.

Panelist, "The Tenure Process: Grounds Rules and Perspectives Workshop," Metropolitan State University, December 6, 2001.

Panelist, "Growing Pains: How Can Metro State's Growth Best Serve Students?" November 7, 2001.

Moderator, Town Meeting, 32nd SIGCSE Technical Symposium on Computer Science Education, Charlotte, SC, Feb. 24, 2001.

Moderator, "Panel on Student Outcomes Assessment: What Works and What Doesn't," SIGCSE 2000 Technical Symposium on Computer Science Education, Austin, TX, March 9, 2000.

Panelist, "Teaching Advice and Support for New and Adjunct Faculty: Experiences, Policies and Strategies," SIGCSE 2000 Technical Symposium on Computer Science Education, Austin, TX, March 10, 2000.

Moderator, Town Meeting, 30th SIGCSE Technical Symposium on Computer Science Education, New Orleans, LA, March 26, 1999.

Fitzgerald, Sue. "Measuring Learning Outcomes in a Competency-Based CS 2 Course," Small College Computing Symposium, Fargo, ND, April 18, 1998.

Round Table on "Advice to Doctoral Students," Doctoral Consortium, ACM SIGCSE Technical Symposium, Feb. 25, 1998.

Panel on "Learning Outcomes and Assessment." Metropolitan State University, Oct. 17, 1997.

"Modern Curriculums in MIS and Computer Related Degree Programs." Presented at the Solutions Exposed Conference, sponsored by Association of Information Technology Professionals (formerly DPMA), Minneapolis, MN, Sept. 25, 1997.

Panel on "Female-Friendly Classrooms", National Education Computing Conference (NECC), 1996.

"The Computer Science Fair: An Alternative to the Computer Programming Contest." Presented at the Twenty-Seventh SIGCSE Technical Symposium on Computer Science Education (SIGCSE), 1996.

Career Day for Girls, St. Theresa's Academy, 1996.

"Simple Lab Exercises and Examples in C++ for the Introductory Programming Course," Central Plains Small College Computing Conference, Southwest Baptist University, Bolivar, MO, March 31, 1995.

"A Project for a Computer Networking Course: Applying Theory to Practice," Southeastern Small College Computing Conference, Wesleyan University, Macon, GA, Nov. 12, 1994.

"Simple Lab Exercises and Examples in C++ for the Introductory Programming Course," Southeastern Small College Computing Conference, Furman University, Greenville, SC, Nov. 12, 1994.

"Performance Analysis of a Multi-Channel Adaptive Routing Protocol with Multiple Buffers," University of Missouri, Kansas City, MO, Nov. 17, 1993.

"Performance of High-Speed Networks," Celebration of Scholarship, Rockhurst College, Sept. 23, 1993.

"Cooperative Group Learning: A Viable Strategy for Computer-Based Laboratories?" University of Missouri, Kansas City, MO, June, 1992.

"Cooperative Group Learning: A Viable Strategy for Computer-Based Laboratories?" Rockhurst College, April 14, 1992.

"Cooperative Group Learning: A Viable Strategy for Computer-Based Laboratories?" South Central Small College Computing Conference, April 11, 1992.

SCHOLARSHIPS, GRANTS AND DONATIONS

University of Minnesota Summer School for Information Assurance UMSSIA Program, 2007 (\$5,000)

NSF Information Assurance Educational Support Program (curriculum development), Iowa State University, July 13-15, 2003 (\$500)

NSF Bootstrapping Research in Computer Science Education Workshop, Port Townsend, Washington, June 1-6, 2002 and June 6-12, 2003 (travel stipend)

Fulbright Scholar to Barbados Community College, August, 2002-May, 2003 (\$41,000)

NSF Network Administration Workshop, Rockhurst College, Kansas City, MO, July 15-19, 2002 (travel stipend)

Sun Academic Alliance (with Jigang Liu), matching equipment, 2002 (\$39,000)

Minnesota State Colleges and Universities Leveraged Equipment Grant (with Jigang Liu), 2002 (\$56,000)

Rational SEED Program, Rational Enterprise Suite software, 2001 (\$5,434,000)

Borland JBuilder software (with Brahma Dathan), 2001 (\$11,000)

Sun Academic Alliance (with Jigang Liu), matching equipment, 2000 (\$39,000)

Minnesota State Colleges and Universities Leveraged Equipment Grant (with Fred Kirchhoff), 2000 (\$39,000)

Professional Development Grants, Metropolitan State University, 2009 (\$300), 2008 (\$400), 2007 (\$1000), 2006 (\$570), 2005 (\$900), 2005 (\$700), 1997 (\$325), 1996 (\$800)

HONORS AND ACTIVITIES

Organized NSF-funded Qualitative Research Methods workshops, 2009-2010

Organized roundtable discussion, *Rethinking Computing Education*, with Microsoft's Chief Research and Strategy Officer, Craig Mundie, and international computer science education leaders, 2009.

Program Committee, Web-Based Learning: Innovation and Challenges (WeLearn-2009) track of the Second International Computer Science and Technology Conference (ICSTC-2009), San Diego, CA, 2009.

CRA-W Distinguished Professor (2008)

ACM Special Interest Group in Computer Science Education Technical Symposium, Conference Co-Chair, \$400,000 budget (2009), Program Co-Chair (2008), Panels Coordinator (1998)

Organized NSF-funded Statistics Bootcamp for Computer Science Education Researchers, 2007

Guest editor, Special Issue on Recent Doctoral Research, Computer Science Education (2004)

Fulbright Scholar (2002-2003)

Program Committee, Sixth Australasian Computing Education Conference (ACE2005, ACE2004)

Program committee, Information Assurance, Network, Database and Software Security Symposium, St.

Cloud State University, (2004, 2007, 2008, 2009)
SIGCSE Doctoral Consortium, co-chair (2003, 2004), discussant (2002)
Anoka-Ramsey Community College Advisory Board (2004)
International planning session for Computing Curriculum 2001, Pedagogy Focus Group 4: Professional Practices Report, attendee (June 2-4, 2000)
CC2001 Workshop for Twin Cities Metropolitan Area, organizer (June 5, 2001)
Minnesota Information Professional Society, member, program committee (2000-2001)
North Hennepin Community College Computer Science Advisory Committee (1998-2007)
NSF Course, Curriculum and Lab Implementation Program grant proposal reviewer (FY99)
Mayor's High Technology Council, St. Paul, MN (1998)
Designed curriculum and introduced computer science major (1998)
Consortium for Computing in Small Colleges, Board Member at Large (1992-1994), President-Elect (1995), President (1996), Immediate Past-President (1997)
Communication Networks Modeling and Simulation Conference, Program Chair (1996)
Rockhurst Computer Fair, chair (1994-1995)
Central Plains Small College Computing Conference, Steering committee (1994, 1995, 1996)
Girl Scout Day Camp, coordinator, computer badge activities (1994)
Science division promotional video, producer (1993)
Scientist penpal, Science-By-Mail (1991-1992)
Reader, Low Vision Library, Kansas City Council for the Blind (1990)
Volunteer, Kansas City Committee for UNICEF (1990)
South Central Small College Computer Conference, Program chair (1989-1993)
Moderator, Community Roundtable on High Technology, St. Edward's University (1988)
Group Programs Chairman (fundraising), Austin Council for UNICEF (1988)
Reviewed papers for Communications of the ACM, Computers and Education, International Journal in Computer Simulation, Journal of Computing in Small Colleges, Symposium on Applied Computing, SIGSCE Technical Symposium, Computer Science Education, International Computing Education Research Workshop.

PROFESSIONAL ORGANIZATIONS

Voting member, Association for Computing Machinery
Member, ACM SIGCSE
Member, Institute of Electrical and Electronics Engineers, Computer Society

Dr. Siva R Jasthi, Ph.D
1754 Elm St
White Bear Lake, MN - 55110

(W) 651-482-2160 (H): 651-748-8225 *Email:* siva.jasthi@metrostate.edu

Summary

- More than 9 years of part-time teaching experience.
- More than 16 years of experience in analysis, design, development and maintenance of Data Management applications on multiple platforms involving Graphical User Interface, Object-Oriented Programming and software development tools.
- More than 8 years experience in managing distributed and diverse development teams
- Published many research articles (1 chapter in a book, 4 journal and 21 conference articles). Two Patents Pending.
- Has advanced qualifications and an aptitude towards academics and research with lucid written and oral presentation skills.

Education

Ph.D., CAD/CAM (January, 1994)
Indian Institute of Technology, New Delhi, India
Thesis: Some studies on form-features in the development of a CAPP system

M.S., Industrial Engineering (January, 1990)
P S G College of Technology, Coimbatore, India
Thesis: EXPAGE - An Expert Aid for the Process Planning of Gears

B.S., Mechanical Engineering (December, 1987)
J N T U College of Engineering, Anantapur, India
Thesis: IBOM - An Interactive Bill of Materials System

Experience

Community Faculty (Jan. 2001 – till date)
Information and Computer Sciences Department, Metropolitan State University, St. Paul

- Taught ICS240 – Lecture (Programming with Elementary Data Structures)
- Currently Teaching ICS141 – Lecture/Lab (Programming with Objects)

Development Manager (May 2004 – till date)

Siemens PLM Software, Shoreview MN

- Managed teams ranging from 10 to 80
- Managed projects ranging from 2months to 200 months
- Managed projects spanning 1 team to the entire organization

Principal Software Engineer (May. 1998 – May 2004)

UGS PLM Solutions, Arden Hills, MN

- Team Lead for the development of Enterprise Reports Framework
- Team Lead for Change Management
- Designed and developed Metaphase Change Management User Interface in Java
- Submitted two patents to United States Patents and Trademark Office

Senior Software Engineer (Jan. 1995 - .May. 1998)

Computervision Corporation - Pune, India and Bedford, MA, USA.

- Participated in the Optegra-Workflow development for the complete product development cycle
- Handled Workflow GUI Development in Neuron-Data (Multi-Platform GUI Toolkit)
- Integrated GUI with the Trackit-Workflow Engine
- Coordinated multi-site development effort (Product Engineering, Marketing, Field and Services, Quality Assurance, Development Environment and Integration)
- Provided Technical Guidance and Leadership to the team members
- Extended Localization Support for the customers in France, Germany and Japan
- Maintained and enhanced the product - Optegra-Navigator
- Monitored the defects using centralized bug-tracking system (Scopus).

Senior Scientific Engineer-II (September 1993 - January 1995)

Numerical Control Laboratory, Indian Institute of Technology-Delhi, India

- Coordinated a sponsored research project on Engineering Data Management for CIM
- Developed Bill of Materials (BOM) and Material Requirements Planning (MRP) modules
- Acquired skills in project management and software development process.

Research Scholar (January 1990 - September 1993)

Dept. of Mechanical Engg., Indian Institute of Technology - Delhi, India

- Investigated Feature-based modeling methods for CAD/CAM Integration
- Executed a sponsored research project on Computer Aided Process Planning (CAPP)
- Designed and developed a feature-based CAPP system for rotational parts (GIFTS)
- Taught courses in fundamentals of CNC and Computer-Programming