

OBJECTIVE

My professional objective is to advance Computer Science education and research, specifically the area of Artificial Intelligence. I am particularly interested in Interactive Narrative when applied to Digital Games, both for entertainment and instructional purposes.

PROFILE

- Ph.D. student of Computer Science at North Carolina State University. Currently working on research focused on the applications of digital games technology to crime scene investigation.
- Experienced in the roles of Graduate Research Assistant and Teaching Assistant.
- Experienced developer of web-based, services-oriented, and client/server applications
- Demonstrated ability in the role of lead programmer for large-scale development projects
- Extensive experience in the use of Object Oriented languages and the Microsoft .NET framework
- Practical experience in the development of database applications using Microsoft SQL Server and Oracle
- Excellent communication skills

EDUCATION and PROFESSIONAL CERTIFICATIONS

Florida State University

Master of Science in Computer Science (1997)

Texas A&M University-Kingsville

Bachelor of Science in Computer Science (1994)

Magna cum Laude

Microsoft Certified Professional (1998-present)

TECHNICAL TRAINING

Guerilla .NET, *Developmentor*

Guerrilla VB, *Developmentor*

Guerrilla COM, *Developmentor*

SKILLS

Programming Languages and Technologies:

C#, C++, C, Java, JavaScript, Visual Basic .NET and 6.0, VBScript, HTML, XML/XSL, T-SQL, PL/SQL, Microsoft .NET Framework, Web Services, WCF, WSE, J2EE, SSL, COM+, IIS, Apache Web Server, Oracle Application Server

Database Management Systems:

Oracle 8i, Microsoft SQL Server, Microsoft Access, Progress

Operating Systems:

Microsoft Windows, Solaris 8, Linux, Mac OS X, X Windows

Software:

Microsoft Visual Studio 2005, Microsoft Team Foundation System, eCclipse, Oracle JDeveloper 9i, CVS source control, Crystal Reports, SQL Server Reporting Services, CA SiteMinder, CA IdentityMinder, CA eTrust Directory, Macromedia Dreamweaver, MS Project, Microsoft Office products, Quest TOAD, VNC, VISIO, WebFOCUS

EXPERIENCE

NORTH CAROLINA STATE UNIVERSITY, Raleigh, NC (August 2009 – present)

Research Assistant, Department of Computer Science, Liquid Narrative Group.
Member of a team tasked with the development of a software solution to assist crime scene investigators. The team is developing a collaboration tool that uses the Unity 3D game engine as its development platform. The project is funded by a grant from the National Science Foundation.

Teaching Assistant, Department of Computer Science.
Responsible for grading of student assignments and exams. Also in charge of assisting students with questions related to homework and course topics.

LANDSTAR SYSTEM, INC., Jacksonville, Florida (2005 – August, 2009)

Senior Programmer/Analyst. Responsible for the development and support of web-based software solutions critical to the company's business. Responsibilities have primarily been the development and enhancement of applications in accordance to specifications. Duties have also included: troubleshooting and resolution of problems detected on the company's production systems and the documentation of maintenance and troubleshooting procedures.

PROJECTS:

Identity and Access Management System

Participated in the implementation of the back-end system used to control access to Landstar's extranet. The solution was based on an off-the shelf commercial solution which was heavily customized to meet the company's needs. The work performed also included conversion of the user profile data from the company's homegrown legacy system to the user directory used by the commercial product chosen to control access.

LandstarBroker.com

Implemented enhancements including the implementation of secure access to restricted areas of the site and new functionality to enable users to advertise the availability of trucks ready to move cargo. The information entered via the new functionality allowed the company to expand its business opportunities.

LandstarOnline.com - Online Calendar

Developed a web-based calendar application used to inform Landstar's employees about important company events. The application is secure and allows administrators to dynamically enter events via a web interface, thus replacing a previous solution which used static web pages.

LandstarMobile.com

A web-based application targeted to users of mobile devices such as smart phones and Pocket PC. The application was built using a Services-Oriented Architecture (SOA) and leveraging Microsoft Mobile Framework for .NET.

LandstarOnline.com - LEADS

Participated in the successful implementation of a mission-critical web-based order entering system. The system was developed to replace an existing client-server application used by Landstar's sales agents. LEADS presents users with a rich web interface which takes advantage of technologies such as AJAX and third-party ASP.NET GUI controls supplied by a vendor. The LEADS application is expected to have a very positive impact in the way sales agents do business by improving their flexibility in terms of order entering and providing a more efficient user interface.

INFORMATION SYSTEMS OF FLORIDA, Jacksonville, Florida (1996 – 2005)

Programmer/Analyst and technical lead. Work on high-budget software development projects for several governmental agencies and private firms.

PROJECTS:

Florida Department of Community Affairs, *Building Code Information System (2004-present)*

Maintenance and enhancement of web-based application using ASP.NET

Department of Financial Services, Continuing Education System (2004)
Developing ASP application using n-tier design.

Polk Community College, SASCom (2003 – 2004)
Taking part as business analyst to establish business requirements and to improve existing business flows.

Florida State Fire College, Continuing Education System (2003)
Implementing secure, web-based interactive registration system for the Continuing Education of Fire and Rescue personnel.

Department of Education, Statewide Common Course Numbering System, (2001 – 2003)
Technical lead of the team that developed a web-based postsecondary course data management and storage system to allow universities and colleges to comply with statewide course requirements. Responsible for the design and implementation of system architecture based on the Java J2EE platform.

Department of Financial Services, Agent/Agency Licensing Functions System (2001-2004)
Lead programmer and designer of a web-based application to handle the submission of applications and fees for all licenses issued by the State of Florida to insurance agents. Developed a component for the dynamic generation of page content using XML and data stored in Oracle.

Duval County Public Schools, Budget Preparation System (2001)
Technical Lead of the team that developed an Intranet application to process school budget information. Responsible for the design and implementation of the system architecture.

Department of Community Affairs, Building Codes Information System (2000 – 2004)
Development and maintenance of E-commerce application to provide access to information related to the Florida Building Code. Users can order training materials, locate training providers, obtain plans approval, and apply for building insignias. Implemented a secure site for the collection and processing of credit card payments.

Store Opening Solutions, Merchandise Dock Receiving System (1998 – 1999)
Developed an application to provide merchandise information needed to operate a warehouse receiving dock.

Duval County Public Schools, Student Data Warehouse (1998 – 2001)
Lead programmer of team implementing an information support system using data extracted from a mainframe database. Designed and implemented a data extraction tool.

Department of Education, Project Tracking System (1998)

Project manager and lead programmer of project to replace a mainframe application with a windows-based program. The application included a component for generation of ad-hoc reports through a graphical interface.

Department of Education, *Data Flow Controller (1996 – 2003)*

Development of middleware software product to integrate state educational information systems, school district administrative and instructional software, and commercial software. Responsibilities included software design, software testing, performance tuning, and technical support to end users.

Physicians Sales and Services, *Price DLL (1996 – 1997)*

Development of a Microsoft Windows DLL to calculate product prices using information stored on a database.

FLORIDA STATE UNIVERSITY, Tallahassee, Florida (1994–1996)

Teaching Assistant, Department of Computer Science (1995 – 1996)

Teaching Object Oriented Development using C++, assisting students with their programming assignments, and grading of assignments.

Assistant to the Senior Programmer Analyst, Department of Biology (1994)

Responsible for the installation and maintenance of Macintosh and PC equipment on the Local Area Network.

OTHER SKILLS AND ACHIEVEMENTS

Dean's Fellowship, NC State University College of Engineering (2009)

Teaching Assistant, Fall Semester 2009

Research Assistant, Spring Semester 2010

Bilingual, English – Spanish

2007 Ironman Coeur d'Alene Finisher

2003 New York City Marathon Finisher

2002 Florida Ironman Triathlon Finisher

1999 Chicago Marathon Finisher

MS150 Bike Tour, Participant and Fundraiser (2000-2004)