

Competencies

Roles

Project Manager; Application Architect; Database Designer; Software Developer

Programming Languages

Active Server Pages (ASP.Net 1.x, ASP.NET 2.0, and classic ASP); Visual Basic (.Net and 6.0), C#, Java; JavaScript; VBScript; C; Delphi; Pascal; Assembly Language (multiple processor platforms)

Web Servers & Web Application Servers

MS Internet Information Server (IIS)

Operating Systems & Databases

Windows XP, Windows 2000 Server; Windows 2000 Professional; NT Server; NT Workstation; Windows 98; Windows 95; OSX; SQL Server; DB2, Access

Development Environments & Tools

ERWIN; MS Visual Studio; Dreamweaver; Visio; XML Spy; Front Page; Microsoft Project; Project Builder, Interface Builder

Training & Certification

Microsoft Certified Solution Developer (MCSD)

- Designing and Implementing Desktop Applications with Microsoft Visual Basic 6.0 (70-176)
- Designing and Implementing Distributed Applications with Microsoft Visual Basic 6.0 (70-175)
- Designing and Implementing Databases with Microsoft SQL Server 7.0 (70-029)
- Analyzing Requirements and Defining Solution Architectures (70-100)

Sun Certified Java 2 Programmer (310-025)

GE Certified Six Sigma Black Belt

Licensed Professional Engineer

Software Test Planning; Software Design for Six Sigma; Introduction to CMM; Smart Simple Design

Dominion Digital, Inc.

Managing Consultant – March 1999 to present

- Co-developed the architecture and led the design and development of an application used to manage employee training. The application provides the ability to manage all aspects of employee training including tracking employee skills, the skills required for jobs, assessing the delta between an employee and a job, and providing on-line assessments. The technologies used for the application included Microsoft's .NET (ASP.NET, Web Services, and Visual Basic .NET), XML, and SQL Server.
- Co-developed the architecture and led the design and development of an application to increase the efficiency of a catalog production process. The application provides the ability to setup catalogs, manage the photography for the catalog, provide a configurable work flow for the production of the catalog, and tools to determine the current state of the production. The technologies used for the application included Java, Jini Services, Web Services, native OSX applications, Cocoa, and Oracle.
- Developed the architecture and led the design and development of a website specializing in the brokering of used and collectable books from a large population of booksellers throughout the world. The application was unique in its ability to receive uploaded inventory files from the booksellers and parse the inconsistent data in a manner that resulted in very fast and accurate searches for the one-of-a-kind books offered for sale on the site. The technologies used for the application included Microsoft's .NET (ASP .NET and Visual Basic .NET), XML, and SQL Server.
- Developed the architecture for a web based score entry and reporting system used in the state of Illinois early literacy program. The application provided the collaborative participation of educators and administrators throughout the state. The technologies used for the application included Microsoft's .NET (ASP .NET and Visual Basic .NET), XML, and SQL Server.
- Developed an extensible and reusable framework for Microsoft's .NET development environment. The goal of the framework was to provide a consistent structure for .NET developments with emphasis on code reuse and reduction of development time. The framework is currently used for all .NET developments at Dominion Digital.
- Developed the architecture and led the design and development of a website to deliver subscription based legal content to end users. The website was designed to be highly configurable without

programming changes. The technologies used for the website included Microsoft's .NET (ASP .NET and Visual Basic .NET), XML, LivePublish, and SQL Server.

- For a client specializing in reverse logistics, co-developed the architecture and led the design and development of a complex system to process returned merchandise. The system included multiple custom applications utilizing touch screen user interfaces and bar code readers along with interfaces to legacy systems. Led the integration efforts and startup activities with multiple vendors for the initial 250,000 sq. ft., 1.5 miles of conveyor, processing facility. The technologies used for the system included Visual Basic, XML, DCOM, ASP, JavaScript, and DB2.
- Developed the architecture and led the design and development of a website specializing in reviews of sophisticated travel destinations. The website consisted of a public access section, a subscription based section, and backend tools to control and monitor the content of the site. The technologies used for the website included ASP, JavaScript, HTML, Flash, Visual Basic, WebBoard, and SQL Server.
- Developed the architecture and led the design and development of a dynamic content website. The website was designed to provide nearly complete control of its content to the client. The backend tools provided the ability to schedule content as well as provide monitoring of the scheduled content to verify content was always available for display on the website. The technologies used for the website included ASP, JavaScript, HTML, Visual Basic, WebBoard, and SQL Server.
- Developed the architecture and implemented a closed loop led tracking application for a client. The application provided the ability to enter new sales leads, assign the leads to sales personnel, provide the ability for the sales personnel to enter the results of the sales calls, and various reporting on the lead information. The technologies used for the website included ASP, JavaScript, HTML, Visual Basic, WebBoard, and SQL Server.

GE Fanuc Automation

Staff Software Engineer – May 1995 to March 1999

- Worked as part of a small team of system Engineers to develop the system design for a new product line that included PLC, network interface units (NIU), and I/O modules. Designed the API (applications interface) and the core firmware used with all NIUs in the product line. Co-designed the API and core firmware used with all I/O modules in the product line.
- Wrote firmware in C and assembly language for multiple products on various platforms. Wrote multiple support tools using Delphi to facilitate product testing during environmental and production testing.

Independent Consultant (Part Time)

1984 to 1999

- Developed custom software and defined hardware for use in various industrial environments including die-casting, manufacturing, surveying, facilities management, and recycling industries. Example programs:
 - **Man-Machine Interface Program**
Touch screen based program used to monitor and control operation of multi-station plastics recycling system. The program interfaced with multiple DSP based "algorithm processors" and provided the overall system control via a control program developed by the operator within the MMI program. The control program was input by the user as a flow chart that was then interpreted during runtime. The program was written using Delphi.
 - **Facilities Management Program**
Database program used to schedule rooms and equipment within a facility to provide controlled access to all facility assets including facility utilization reports. The program was written in Pascal using a B-tree database.
 - **Topographical Map Program**
Generated topographical maps from surveying data input to the program. The program provided the ability to edit, clip, view and plot the topographical map. The program was written in Pascal.
 - **Statistical Process Control program**

Collected measurement data from sample parts, stored all measurement data, and generated statistical reports to determine how well the process was controlled. The program was written in Pascal.

National Recovery Technologies

Manager Electronic Development – June 1990 to April 1995

- Responsible for all electronic development activities (hardware and software), customer service training, and equipment installations in international locations. All products were designed for industrial environments.
- Developed the VinylCycle[®] utilizing x-ray technology, multiple microprocessors, and sophisticated algorithms to identify and remove PVC plastics from a mixed plastic stream at rates up to 5000 pounds per hour. The company received EPA's most outstanding small business award for the design that generated \$3.5+ million revenue in 4 years.
- Developed the Autosort[®] utilizing CCD cameras, multiple processors, and statistical algorithms to identify and separate plastics by color from a mixed plastic stream at rates up to 5000 pounds per hour. The product generated \$500,000+ revenue in 2 years.

Teledyne, Lewisburg

Principal Engineer – April 1981 to June 1990

- Responsible for project Engineering and systems Engineering on custom automatic test equipment (ATE) hardware and software. All products were designed for use on the manufacturing floor. DOD and DOE secret clearances.

Union Carbide

Instrument Engineer – June 1975 to April 1981

- Responsible for circuit design of test, measurement and control equipment. DOE secret clearance.

Education

B.S. Electrical Engineering

Tennessee Technological University; Cookeville, TN; June 1975

Other

Professional Engineer, licensed in the state of Tennessee, 1980

Co-author of ASP .NET Cookbook (O'Reilly and Associates, 2004).

Co-author of ASP .NET 2.0 Cookbook (O'Reilly and Associates, 2005).