



Representative Project List

ASP.Net Application Development System

2004-2006

ASP.Net system developed in C#, ASP.Net 1.1 & 2.0, and SQL Server. Its modular design assists in the rapid development of 3-tier software applications for HR related applications. Some key features:

- ❖ Core library based on HR-XML – classes to represent persons, names, addresses, business units, demographic data, etc
- ❖ Visual components to represent core library objects. Web designers have access to the visual and behavioral properties of these objects.
- ❖ Object and role based security.
- ❖ Database neutral data access layer allows plug-in architecture for dynamically loaded data provider modules

Working applications include a background checking system and a document management system.

Web Services Data Interface

2004-2006

Web service that extracts data from third party information providers. Modules include interfaces to Credit Bureaus (Experian and Equifax), Driving Record data, national criminal databases, the federal government OFAC list, and insurance databases.

Technology: C#, ASP.Net

Client-Server Background Checking System

1994-2004

Architected and developed comprehensive HR-related software for use in Background checking applications, including Drug Testing and Credit Analysis. Still in use by a large Tampa area background checking firm.

Technology: PowerBuilder, Visual Basic, Sybase SQL Anywhere

Digital Signal Processing

2002-2003

Developed system that collects and analyzes ultrasound data produced by the interior mechanisms of heavy machinery. Key components developed for this project include:

- ❖ COM objects that interface to the data acquisition technology
- ❖ Mathematical algorithms (based on Fourier transforms) to analyze the data and look for abnormalities
- ❖ User interface to monitor the sensors
- ❖ Network control program that amalgamates data from multiple sources, saves results to database, and triggers alarms on abnormal data

Client: SwanTech. System is in use in power plants (e.g., Colorado Power) and cruise ships (Carnival).

Technology: C++, ATL, COM, Visual Basic, SQL Server

Voice Recognition & Transcription

2001-2002

Developed COM objects to access IBM's ViaVoice speech recognition servers for medical transcription systems. These objects used DCOM to allow easy programmatic access to the speech recognition engine across networked, distributed systems. Developed algorithms to synchronize the spoken word with the transcribed text.

Technology: XML, Microsoft Visual Studio, Visual C++, COM, MFC, ATL

Hand-held Prescription Writer

2000-2001

Hands-on manager of distributed applications group, developing internet-based software for healthcare applications. Was system architect and project manager for system using Pocket PC devices (PDA) and Windows NT IIS with interface to SQL Server and Oracle databases. Integrated disparate technologies including C++, XML, HTTP, Active Server Pages, and Site Server. Developed requirements documents using UML for analysis and design. Developed project plans. Developed electronic prescription writer program and medical transcription system for PocketPC.

Client: Cybear division of ANDRX pharmaceuticals

Technology: UML, COM, C++, MFC, Windows CE, PocketPC

DataBridge

1998-2000

DataBridge is a distributed system that provides a standardized way for wireless bar code readers to interact with ERP systems. DataBridge acts as a web host to bar code readers running an HTML/HTTP forms processor. DataBridge then runs scripts that interface to the back-end ERP system, typically inventory tracking events. This technology eliminated the need to develop and test custom software for different computer systems and multiple versions of Unix.

ERP Systems Supported: MfgPro, Oracle Manufacturing

Representative clients: Gillette, Johnson & Johnson, Groton

Alarm Monitoring & Access Control

1993-1998

Developed alarm monitoring and access control system for a network of wireless alarm and card reader systems.

Wireless Security Alarm system

design and network system architecture for wireless security alarm and access control systems using Spread Spectrum technology and Object Oriented Architecture. Designed User Interface and wrote documentation.

On-line Access Control System: Designed and developed real-time access control and alarm monitoring system that tracked personnel, alarms, and Time/Attendance information stored in relational database.

Versions developed for Northern Computers and Integrated Computer Applications

Packet Switching Network

1988-1993

X.25 Packet Switching Network. Oversaw development and deployment of a packet switching network for a consortium of Wall Street firms for a distributed financial application. System designed according to international ISO recommendations including CCITT X.25, ISO 8208 and modeled on Open Systems Interconnection (OSI) Reference Model.