

Professional Profile – Senior .NET Developer

Since the .NET framework became available to Microsoft partners, I have been actively involved in making applications for shrink-wrap, web, and internal deployment. As an active member of the .NET development community, I have obtained the skill and resources normally attributed to expert level developers. Through my experiences, I have acquired extensive expertise in security, biometrics, document building/storage, multithreaded systems, scalable client/server, and multi-tier web applications.

Because of my personal interest in software development, I am working, as a hobbyist and professional, with cutting edge technologies including:

- Windows CE programming with Windows Mobile 5/6 and the .NET Compact Framework 3.5.
- Team Foundation Server and the Team System 2005 and 2008, including custom process templates and reports.
- Windows Workflow and WCF integration, with an eye on easy maintenance and extensibility.

Below is a list of some relevant experience and skills:

- C# – Since 2002
- VB – Since 1999
- C/C++ – Since 1997
- ASP.NET – Since 2003
- .NET 3.0, 3.5 – Since 2007
- .NET 2.0 – Since 2005
- .NET 1.0, 1.1 – Since 2002
- MS SQL 2008 – Since 2008
- MS SQL 2005 – Since 2005
- MS SQL 2000 – Since 2001
- Object Orientated Design (OOD)
- “Scale-out” scalability Development
- Multi-threaded Development
- Design for Testing and Unit-Testing
- Visual Studio 2k, 2k3, 2k5, 2k8, 2k10
- VSS, CVS, and TFS (Agile, CMMI, Scrum)
- Managed and unmanaged integration
- Advanced XML, XSL (XSLT and XSL-FO)
- Windows Mobile and CE Development

Selected Professional .NET Accomplishments

MobilePro Invoice, PDA Invoicing Application (MobilePro Solutions)

- Solely designed and developed a mobile invoicing application for Windows Mobile 5 devices aimed at mobile automotive reconditioning professionals.
- Application backs up all information to an Internet server and automatically updates when internet connection available, such as GPRS or when device is cradled. This system uses Web Services.
- An Internet portal allows customers to access their account information and view outstanding invoices using DotNetNuke and a custom ASP.NET 2.0 website.

Biometric Identification Systems (U.S. Biometrics)

- Worked on systems to control user access using biometric identification.
- Developed systems using Windows XP Embedded to control physical resources such as doors, cabinets, money drawers, ect.
- Designed and developed systems to embed users' signatures into seemingly decorative borders and recover signatures perfectly, even when over 80% of the original border has been corrupted by tears, smudges, staples, ect.

“Create a Calendar” Retail Product (Your Life Marketing)

- Solely designed and developed complex .NET based applications that allow customers to find and edit personal photographs on their computer and turn them into custom personal calendars to be professionally printed by Your Life Marketing, Inc.
- 100% dynamically “skin-able” interface to provide branding opportunities for advertising partners.
- Allowed photos to be encrypted and embedded in the carrier CD to allow photographers to sell the product without compromising their photo copyrights.
- Product currently being used (as of 3/2005) in national shopping centers by seasonal photographers and in testing at Carnival Cruise Lines.

YourLifeCalendars.com web application (Your Life Marketing)

- Designed and developed a .NET application to allow customer upload and edit personal photographs and turn them into custom personal calendars to be professionally printed by Your Life Marketing, Inc.
- Designed and developed a custom multithreaded image processing system.

Variable Printing System (Variez)

- Solely designed and developed a revolutionary system using all managed .NET code to allow the creation of dynamic “one-off” printing using variable data at a technology cost of less than \$0.01 per page.
 - This system currently processes over 3 gigabytes per hour (as of 3/2005) using a complex multithreaded, multi-computer network to distribute work across “n” computers.
 - Designed and implemented a high performance Microsoft SQL Server 2000 Enterprise database tier holding terabytes of data pending processing.
-

Work History

Senior .NET Developer

U.S. Biometrics, Inc.
Naperville, IL

4/2005 to Current

I am charged with building tools for both internal and customer user, building functional product concepts, shrink-wrap software, and supporting product teams to meet deadlines. I am further tasked with providing partner companies solutions to complex or unique requirements that may not fall into the company roadmap. As a project lead, I worked to improve the technical skills and education of other employees, develop and implement processes to improve the success rate of our projects, and make sure project planning met the company's goals.

Selected Projects:

- Built a scalable fingerprint matching system with the ability to “plug-in” new servers for automatic and instant performance improvements. Microsoft Message Queue (MSMQ) was used for scalability. Web services, and later WCF, were used to receive match requests on redundant frontend servers while each matching server held a “match service”. System health was maintained by a health monitor who had the ability to repartition the system and restart/recreate servers to fix stability issues.
- Worked on and maintained an application that allowed users to record and playback templates of login screens, such as a GMail, or banking application login. This system supported both Windows and web applications using both Win32 API calls (Global hooks and sub-classing) in a managed environment as well as Internet Explorer Browser Help Objects (BHO) and Firefox extensions.
- Developed and maintains a website site to manage criminal offenders on probation. This system was built using ASP.NET 2.0, ActiveX (for fingerprint scanning). A large part of this project was building a well structured object model over a proprietary C++ database.
- Developed a multi-threaded, multi-client load and stress test system to for testing U.S. Biometric components and applications. This system was built using C# using .NET 1.1 and later 2.0. The entire system used asynchronous multi-threaded techniques.
- Developed a product licensing and activation system functionally equivalent Microsoft's Windows activation system. This system used VC++ for extracting low level computer information, C# for logic, C# based ASP.NET web services for communication between U.S. Biometric activation servers and the client, and C# based ASP.NET web sites for management. SQL Server 2000 SP3A, SP4 was used for data storage.
- Developed a system to encode a customer's signature into the border of a bank note (personal/business check). This allowed a signature to be stored using less then 1.5 sq-in of total space as well as provide error correction event under extreme corruption caused by smudges, tears, and marking. This allows a computer system to compare the signature encoded in the check to the signature of the signer. This system was build using C# and .NET 1.1, as well as built using VB.NET. In June of 2006, after a 12 month probationary patent, this system was submitted for a full patent.

VP of Technology

Your Life Marketing, LLC

3/2003 to 4/2005

Lisle, IL

Starting in 2003 as a small business of four individuals, Your Life Marketing grew to having over 35 employees. I developed our core technology systems as well as managed a team of six developers and designers. In addition to the soft technology, I also built and managed a data center housing 12 servers and 7 terabytes of customer and product information.

Creating a variable printing and document building system, over two years I built a system that allowed customers to upload personal photos and dates and build custom photo products. The system also allowed a company to including marketing material in the products. For example, a car dealership could give a customer a prepaid certificate for a calendar and allow the customer to upload their personal photos. When the customer received their calendar it would have a photo of their car on the cover, service information, and coupons.

This system processed over 3 gigabytes per hour producing over 340,000 printed pages per month. System uptime (excluding planned downtime for updates) remained above 99.5% per month. Total technology costs remained below \$0.01 per page.

This system was built as a 3-tier system:

- The data tier consisting of a SQL 2000 Enterprise server attached to a 7 terabyte SAN system, backup was provided by a tape library system.
 - The build application tier consisted of dual processor servers that merged customer, marketing, and product information to produce 600dpi print quality or 72dpi web quality PDF files. The resulting print quality PDF files were automatically feed into a customized printer RIP engine, while web quality PDF files were sent to customers via the web interface for proofing. The systems in the layer were developed in C# using .NET 1.1 and 2.0 Beta1, while the RIP engine was developed in VC++ and VB6. Product merging and build used advanced XML based technologies including XML, XSL, and XSL-FO. All web services were developed contract first and used asynchronous polling for communications.
 - The web application tier consisted of dual processor servers that provided customer and management interfaces. All websites were built using ASP.NET with C#, CSS, DHTML, and JavaScript. Later versions added complex custom built AJAX controls using DHTML, JavaScript, and ASP.NET 1.1.
 - A client side application was also developed for Carnival Cruise Lines. This application used a dynamic "skin-able" interface that allowed partners to have the system present itself as graphically unique. For example, the Carnival Cruise Lines application looked like their then-newest ship. This system was developed in VB.NET using a web service interface into the web application tier.
-

Owner Jade Towers Technology 10/1999 – 3/2003
Lombard, IL

Jade Towers Technologies was a small personal business consisting of myself and one other developer. I worked as a consultant providing software applications as well as hardware solutions.

Selected Software projects:

- Developed the first DirectX based teleprompter system for Key West Prompting. At the time this system was developed, competing products used hardware based scrolling systems to allow ultra-smooth scrolling. This program consisted of two components, an editor and prompter.

The editor was written in VC++ 6 using MFC and had such ground-breaking feature as underlining spelling and grammar checking similar to Microsoft Word and speaking length estimator.

The prompter was written in VC++ 6 using DirectX 7 and later 8. While the user just saw letters scroll across the screen, the system built a complex 3D environment to leverage the hardware acceleration of the video subsystem.

- Developed and maintained a complex DLL injection system to allow custom software to interact with DirectX applications and games. This system allowed users to provide complex macros, decode interior structures, and modify process memory. This system was developed in VC++ 6.
- Developed, SpiffTracker, a program for tracking automotive salesmen commissions while a local dealership group migrated between two CRM systems. This system used an Access database and was written in VB6.

Education

B.S. Computer Information Systems DeVry University 2/2002
Addison, IL
