

Overview

Web Technologies

Java, JSP, HTML, XML, Perl, PHP, MySQL, etc.

Design and implement Web-based database driven applications and GUI features for businesses ranging from large scale enterprise applications to small businesses. Includes everything from writing Requirements documents and Technical Specifications and Help Systems, to implementation, testing, and maintenance, through complete release cycles. Also includes page and template design, as well as enhancing usability of existing sites.

Recent projects include:

- **Direct Mail and Leads Tracking System:** Handles personalization of direct marketing materials (email, web, and print); tracking user responses to web site and offers; administration and statistics; follow-ups; etc.
- **Database Driven Product Web Site:** Web site uses database for dynamic content. Products, user info, and other content can be updated from administration pages.
- **Online Registration and Upgrade System:** Allows users to register products online and download software updates if they qualify.
- **Downloadable Literature Search and Maintenance:** Users can search site for downloadable literature by various criteria. Administrators can add, delete and modify documents and references.
- **Online Surveys:** Users can fill out surveys online (in some cases with incentives like prizes). Can be by invitation or anonymous. Administrators can view results and download in a spreadsheet for analysis.
- **Automated Eblast System:** Administration for sending personalized HTML emails to imported mailing list or using internal database. Users can opt-out of future mailings.
- **Miscellaneous Projects:** Updated e-commerce system and online catalog; web site overhaul and maintenance; XML/XSLT schema maintenance application for use by the insurance industry; informative web site for chiropractor; Java Help systems using **RoboHelp**; administration and matching for Irish dating service; etc.
- Implementation included the use of **Perl, PHP, HTML, DHTML, MySQL, JavaScript, Java, JSP, servlets, XML/XSLT, Apache** on **Windows, Macintosh** and **UNIX/Linux**.
- Demos available on my website: <http://www.mlbenson.com>.

Other Technologies

C/C++, CROSS-platform, etc.

Designed and implemented various components for a cross-platform RAD environment. Responsibilities covered the entire life-cycle of the products from designing and writing specifications, to implementation and testing.

- Applications included an Object Oriented, cross-platform GUI toolkit for developing portable C/C++ applications (Windows, Macintosh, Unix, OS/2, etc.) plus **Java** applications, and an Object Oriented business rules engine (a.k.a. expert system or inference engine) with GUI development environment built on this toolkit.
- Responsibilities included cross-platform development as well as creating deliverable product kits for the Macintosh.
- Implementation included the use of **C/C++, Java, and AWT** on **Unix** and **Macintosh**.

Scientific Applications

C, Fortran, Unix, etc.

Designed and implemented features and algorithms for scientific applications for government and related industries.

- Applications included Ground Penetrating Radar (GPR) data image processing, and weather detection algorithms.
- Implementation included the use of **C** and **Fortran** on **Unix** and **VAX** computers.

Professional Experience - Details

Consultant / Contract Engineer

Molecular Devices, FortéBio, Cepheid, Singulex, BGD, International Microsystems, Blaze (FICO), Janzen & Janzen Chiropractic, The Jesse Cause, GBSI, Genuine Introductions, PoppysseedCake.com

4/2002 to Present - Consulting and contract positions specializing in web-based applications. Projects include:

- Designed and implemented a web-based **Leads Tracking System** for small businesses doing direct marketing campaigns. Also updates users automatically when new information is available. Implemented in CGI/Perl and MySQL using Apache on Linux.
- Designed and implemented a database driven system for **dynamic web page content**. Product description pages and other pages are built on the fly using the database. Administrative pages allow updating of products, user information, product registrations, and other content. Implemented in **PHP** and **MySQL**.
- Implemented new look & feel for several commercial web sites using hand-coded **HTML** and **JavaScript**. Also updated and fixed problems with search functions and e-commerce pages using **PHP** and **MySQL**.
- Designed and prototyped new User Interface for ACORD project, a web-based **XML/XSLT** schema maintenance application for use by the insurance industry, using **HTML** & **JavaScript**. Implemented with **JSP**, **Java**, **HTML**, and **JavaScript** on **TomCat** server.
- Designed and implemented many dynamic database-driven web sites using PHP, Perl, MySQL, etc. Applications include jobs postings, news and events, etc. Administration pages allow updating database.
- Implemented DHTML menus, database, forms, and donations via PayPal and Network for Good for The Jesse Cause and GBSI non-profit web sites.
- Designed and implemented an administrative system for a dating service in Ireland. Matches users based on various criteria and allows administrators to track progress.

Senior Software Engineer

Ariba, Inc., Sunnyvale, CA.

8/1999 to 10/2001 - Designed and implemented various GUI and frontend components of Ariba Sourcing and Dynamic Trade products:

- **Sourcing 3.0:** Web based application extending existing Dynamic Trade product. Designers create RFQ's, RFP's, RFI's as well as auctions, reverse auctions, etc. and users bid in these markets. Designed and implemented features such as catalog navigation and item selection, management of type-based catalog, advanced supplier search, various components related to market design and bidding, etc. Components designed with **JSP**, **Java**, **HTML**, **JavaScript**.
- **Dynamic Trade:** Formerly TradingDynamics (acquired by Ariba). Web based suite of applications in which designers create auctions, reverse auctions, exchanges, etc. and traders bid in these markets. Designed and implemented GUI features such as manual clear (the ability for the auction operator to choose winners manually rather than purely algorithmically), advanced market search, etc. Used **Java Servlets**, **JSP**, **HTML**, **JavaScript**.

Senior Software Engineer

Austin-Hayne, Inc. (now SuccessFactors), San Mateo, CA.

1/1999 to 7/1999 - Worked on various parts of Austin-Hayne Employee Builder Series, a web based Management and Human Resources suite of applications:

- **Performance Management:** Used for writing employee evaluations, setting quarterly goals, etc. using workflow to route documents along approval chain. Worked on various parts of this including administrative functions for scheduling periodic actions such as updating the Performance Management database from the HRMS database. Uses proprietary application and web servers with **HTML** templates and **Java Servlets** for building the web pages dynamically. Also involved directly with customers on integration issues.

Senior Software Engineer

Neuron Data, Inc.
(now Blaze
Software, a division
of HNC), San Jose,
CA.

3/1989 to 1/1999 - Designed and implemented various components of Neuron Data "Elements" RAD environment:

- **Presenter & Presenter/J** (Open Interface): Object Oriented, cross-platform GUI toolkit for developing portable C/C++ applications (Windows, Macintosh, Unix, OS/2, etc.) and Java applications.
- **Expert (Nexpert) & Advisor/J**: Object Oriented business rules engine (a.k.a. expert system or inference engine) with GUI development environment built on Presenter and Presenter/J.

Responsibilities cover the entire life-cycle of the products from designing and writing specifications, to implementation and testing, to creating deliverable product kits for **Macintosh (C/C++, Java, AppleScript)**, and **Unix (Solaris, Java, Perl)**. Designed and implemented new platform independent features such as various "widgets", editors, and object browsers. Also responsible for practically everything on the Mac including implementation of multi-platform features, implementation of Mac specific features, user installations, etc.

Software Engineer

Geo-Centers, Inc.,
Newton, MA.

1985 to 1989 - GPR (Ground Penetrating Radar) project. Designed and implemented radar data image processing algorithms. These algorithms search through radar data for patterns indicating buried objects. Also wrote signal processing algorithms using techniques such as FFT's (Fast Fourier Transforms), convolution, filtering and migration. Wrote graphic programs to display and print data in various stages of processing. Much of this was done on Vax (VMS) and Force (Unix) computers using C and Fortran. Designed a character-based screen-oriented menu system for all software. Prototyped new algorithms and graphics on the Macintosh.

Scientific Programmer

Sperry (now Unisys),
Trevose, PA.

1982 to 1984 - NEXRAD (Next Generation Weather Radar) project. Designed, implemented, and integrated weather detection algorithms and related algorithms in a real-time multi-processing environment using a Perkin/Elmer computer and Fortran.

1979 to 1982 - P-3C STP (System Test Program). Developed, and implemented detailed updates and modifications to hardware diagnostic programs for the P-3C Naval Aircraft using the Univac CP-901 and UYK-20 computers with Fortran and Pascal.

Education

B.S. in Computer Science, Penn State University, May 1979. Emphasis in Computer Theory (Database, Compiler Design, Operating Systems, etc.) and Math. Minor emphasis in Linguistics.

Personal



I am very much into music and play the piano and a little classical guitar. (I play a little – the guitar is normal size.) Also, in recent years, I discovered much to my surprise that I love to ski. I'm also into 3D photography and like to send out 3D greeting cards complete with red/blue glasses.

About This Resume

This resume is maintained as an **XML** file along with **XSL** files for transforming it into various forms (plain text with and without carriage returns, HTML for my website, plain HTML, etc.). The XML and XSL files can be downloaded from my website along with the transformation utility.

References

Upon request.