Michael Tracey Zellmann

Technical

Skills: Languages, Tool and Operating Systems:

Java, Perl, Swing, SQL, Ruby, Ruby on Rails, AJAX, JQuery, Lisp, PL/SQL, XML, SVG, XSLT, FOP, C, C#, Visual Basic, JSP

Eclipse, JUnit, Net-Beans, Ant, TextMate, CVS and SVN, Visual Studio .NET, Google Web Tool-kit, Glassfish, Tomcat, JBoss, Java Server Faces, Oracle, MySQL
Windows and Unix

EXPERIENCE: PROGRAMMING

2001 – Present. NautilusOne & Eliassen Group.

Conceive, design, develop and deliver applications that let knowledge workers acquire, analyze, visualize and report on the information they use in their work. The applications typically are Java based, often with Perl as well as relational data bases. They are built as Swing, J2EE or Ruby on Rails applications, deployed through Web-Start or Install Anywhere, or offered as web apps. They make extensive use of Object Design and Design Patterns.

Examples:

OnlineMedicalRegistries.com, Providence, RI **(2009)**

A digital medical-records company wanted a web application to let subscribers create and edit their medical records and establish Advance Directives. Hospital Emergency Room employees are authenticated and authorized to view the records. Each member can have a care-community who are automatically notified if their records are accessed. I complete the entire application using Ruby-on-Rails.

IFX, Minneapolis, MN, **(2008)**

A forum for developing an open, interoperable standard for financial data exchange in the global financial services industry. They needed enhancements for their J2EE web-application to improve function and usability. The application provides architects and reviewers with a tool to make changes to the XML-Schema used for financial exchange SOAP messages. I completed the work using JSP, JQuery and AJAX.

Ambric, Portland, OR**, (2007)**

Had developed a specialized language to let their customers take advantage of multi-core design techniques, and needed an integrated set of documentation in HTML and PDF formats. I designed an XML schema and built an application using Java, XSLT and FOP to create the documentation from their commented code, heavily linked to show the connections between components, and integrated into their Eclipse-based design system.

Consumer Electronics Company (2003 – 2009)

Wanted to see what their customers were saying about their products on various web-sites. Created a service that uses Perl programs to scrape all the reviews from various web-sites, and loads them into a MySql data-base.

Designed Java programs then assemble the records and publish XML documents. These are processed through XSLT style-sheets to create a bi-weekly web-based "Buzz Report". Now I have included J2EE Servlets and JSP to provide search facilities so reviews of any product can be obtained from any date-range.

Another application helped a group which received a large number of suggestions from a community of Bose customers each week. There were too many to be analyzed, so I built a Swing tool to help analyze and categorize the text. Relevant suggestions were then routed to the appropriate people to handle the issues.

Communispace, Watertown, MA, (2006 – 2007)

runs web-based discussion forums on behalf of clients, getting feedback from customers. The analysts have to summarize the discussions into periodic reports. Their own applications could keep up with the volume of discussions, but did not provide good analytical tools. I built a Swing application that lets each analyst quickly assemble, search and report on the essential themes in the discussions.

Manufacturer of Automotive Sound Systems (2006)

Wants to assess the performance of competitive OEM products in other automobiles. Engineers sit in cars and listen to the sound systems and note their impressions. The resulting paper reports were hard to analyze. I built a Swing application that lets the engineers answer questions on a laptop, and then using an image of the car's interior, mark where various sounds originated. When all the reports for a car are complete, the survey administrator collects the data into a concise summary, with histograms of the answers, lists of text verbatims and scatter plots of the sound origins. The entire report is a PDF file created with SVG and FOP, emailed to the recipients. As multiple cars are analyzed, the comparative data can be searched and analyzed.

Concord Free Public Library (2006 – 2007)

Has a large collection of newspapers and town reports from the 19th century and documents describing building histories. They wanted to make them available to researchers around the world. I designed a web-site that tied the documents together – text, images and pop-ups. I built a Java framework that takes in Word, JPEG and TIFF material, and using XML and XSLT and CSS, automatically generates a web story for each building. The newspapers were scanned and the text analyzed and indexed. The newspaper page images are now available through J2EE Servlets with JSP and can be searched, with results ranked on multi-word arguments.

Prior Career Experience

Functional management in several US computer technology companies.

Manager of World-Wide Customer Support for Teradyne's Assembly Test Division. Accomplishments included delivering test systems, programming and support for the B-1/B-2 weapons platforms, final assembly for all Intel's Pentium processors and all Ford Motor Company's braking and engine control systems.

Manager of Printed Wiring Board Technology for Digital Equipment, responsible for successfully acquiring complex printed-wiring boards from a world-wide vendor base.

Director of Advanced Manufacturing, Engineering and Technology for Data General. Implemented new systems at computer plants around the world. Introduced all new products into production.

Program Manager, IBM Industrial Robot Division. Responsible for introducing robotic assembly technology into IBM plants around the world.

IBM Sales Engineer. Sold complex systems to Banks, Educational and Research institutions in the Greater Boston area.

Domain Knowledge

Field and Customer Support, CRM, Production Scheduling, Distribution and Logistics, Business Processes – identification, measurement, improvement and design.

Education

Harvard Extension courses in the Master's program in Information Technology.

Covering Java, Object Design, XML, GIS, Data Mining, Computational Genomics, Interaction Design, Distributed Systems, Operating Systems, Software Architecture, Data Structures and Algorithms.

Harvard University, Bachelor's Degree in Government and Economics.

Graduate Study at Harvard and MIT in Mathematics and Mechanical Engineering.

MIT Sloan School Senior Executive Program.