

Jake Miles

Senior Software Developer, Writer

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Summary

Senior Java/J2EE/Web developer. Excellent design/development skills. Clear graphic interface design. Excellent writing, communication and leadership skills.

Tech Skills

Java: Spring, Hibernate, EJB 2.0 CMP/CMR, Weblogic, Websphere, JDBC/SQL/MySQL/Oracle, Servlets/JSP/Struts, Swing, MVC, Jasper Reports, Velocity, JSF, UML, certified in object-oriented analysis and design, Unified Process, design patterns, aspect-oriented programming (AOP), framework design.

Web: Flex, Actionscript 3, LAMP (Linux/Apache/MySql/PHP), Facebook, Python, mod_rewrite, DHTML/Web 2.0 (XHTML, CSS, Javascript, Ajax, RSS, JSON), Ruby on Rails (RoR), TCL/Tk.

Other: Scheme, Common Lisp, Prolog, XSLT/XQuery/XPath, C++, functional programming, declarative programming, some artificial intelligence.

Publications

IBM DeveloperWorks

[*XSLT as a Language Compiler*](#)

December 2008

Article illustrating how XSLT can be used as a programming language compiler, providing the examples of generating Java source code from XML in the context of an O/R mapping framework, and producing Postscript and PDF documents from XML, specifically XHTML. Covers

the concept of abstraction layers and how to determine what responsibilities and knowledge to keep in each layer. Also covers the basics of Postscript and a number of interesting details about XSLT. *XSLT, Postscript, Java, computer science, programming language compilers*

IBM DeveloperWorks

[Butterfly: Create a framework to support XSLT transformation pipelines](#) November 2008

Article designing a small PHP 5 framework called [Butterfly](#), facilitating the transformation of XML via chains of XSLT stylesheets, including automatic caching of the transformed results at each link of the chain. *PHP 5, XSLT, SimpleXML, Object-oriented framework design.*

IBM DeveloperWorks

[Customize a Google Maps result page with Google Mapplets](#) October 2008

Tutorial on creating a Google Mapplet (an application that runs inside a Google Maps results page), displaying the local weather using the Yahoo RSS Weather feed. Uses the geonames.org reverse geocoder service to translate a longitude/latitude pair into a zipcode, and uses XSLT on the server (PHP 5's XSL module) to transform the Yahoo RSS feed into a KML overlay. The overlay creates a clickable placemark whose popup balloon displays features of the local weather. *PHP 5, XSLT, KML, Google Mapplets API, Google Geocoder, Javascript*

IBM DeveloperWorks

[Separate content from presentation with XSLT, SimpleXML, and PHP 5](#) October 2008

Tutorial exploring two approaches to separating content from presentation in PHP 5, rendering parts of this resume into an HTML web page as an example. One approach uses XSLT to first restructure the XML resume data, then another to translate that structure into a view layout, then another to translate that view layout's XML into HTML. The second half of the tutorial does the same thing using PHP's SimpleXML module, and compares the two techniques. *PHP 5, XSLT, SimpleXML*

IBM DeveloperWorks

[Two-part article series: Overlay data on September 2008 maps using XSLT, KML, and the Google Maps API](#)

Two-part article series on overlaying custom data on Google Maps using XSLT, KML, the Google Geocoder service and the Google Maps API, creating Placemarks with popup windows displaying all available apartment listings for a theoretical real estate brokerage.

Demonstrates use of the Meunchian grouping technique in XSLT. *PHP 5, XSLT, KML, Google Maps API, Google Geocoder, Javascript*

IBM DeveloperWorks

[Three-part tutorial series: Mastering Facebook Application Development](#) May 2008

Three-part tutorial series on implementing a Facebook application from scratch using Java, PHP 5, IBM Websphere, IBM DB2, Zend Core For IBM, Apache 2, the JSON JSP tag library, and the Facebook Java and PHP client libraries. The tutorial implements half the application in PHP 5, half in Java/J2EE using the Spring framework and Spring MVC, using a reverse proxy from Apache 2 to IBM Websphere to let the Java and PHP halves of the application reside at the same web address, and using mod_rewrite to dispatch requests to the two halves.

Takes the reader through the entire application process, setting up a connection-pooled JNDI data source in IBM Websphere, creating a Java web application using the Spring framework, implementing a PHP dispatcher that lets you structure your PHP and Java code similarly, setting up the proxy and mod_rewrite rules, using a JSP tag library to provide JSON data to the Javascript, and using FBML and FBJS to take advantage of Facebook's framework and create an AJAX-driven social application.

Facebook, Java/J2EE, PHP 5, HTML/CSS/Javascript, AJAX, FBML, FBJS, FQL, IBM Websphere, IBM DB2, Zend Core For IBM, Apache 2, .htaccess, mod_rewrite.

Work Experience

Twistage, Inc.*New York, NY**Senior Technical Liason**August 2008 - present*

Joined the team of Twistage Inc as head of professional services. Twistage is a startup providing a full-stack video service for businesses wishing to incorporate video into their websites, including embedding, transcoding, publishing and syndication. Job entails development, acting as a sales engineer, helping to architect and evolve the product, developing useful programming frameworks, and constant interaction with clients to assist with integration of the product and to work with them to improve it. Development is in Flash, Flex, PHP, Ruby on Rails.

Conde Nast Publications*New York, NY**Senior Analyst, Conde Net**July 2007 - July 2008*

Implemented the Flipbook Wizard, a quickstart "wizard" approach to creating Flipbooks to lower the barrier of entry for Facebook users.

After the restructuring of Flip.com, in which it was streamlined into a social network application, took over as tech lead of the project, including all new development and maintenance of the Flip application on Facebook. *Flex, Java, Facebook, MySpace, OpenSocial*

Implemented integration of Flip.com's Flipbook Creator with Photobucket.com, a photo hosting/sharing site, into Flip.com's Flipbook Creator. *Flex, Actionscript, FlexBuilder.*

Joined the development team of Flip.com, a social networking site for teenagers akin to Facebook. Development is in Java, Javascript, Flex and php, using IBM's Websphere application server, the Clearcase source management system and a unix development environment. Work involves interaction with all of CondeNet including a QA department and editorial, and the developers on CondeNet's other websites.

Home Box Office*New York, NY**Senior Software Engineer**August 1999 - July 2007*

Designed and implemented the *Standard MVC Application Framework* (nicknamed "Jakeworks"), that refactors away a lot of the functionality common to most Swing apps written at HBO, and also enforces a standard MVC pattern at compile time in the resulting application code. The framework was used with great success on the NQC project (see below), eliminating a significant percentage of the code base and promoting a more Agile-ish development process. It is expected to be used as the foundation for many client-side projects in the department going forward. The framework leverages Java's strong-typing, generics, and the liberal use of template-methods and abstract classes to let the compiler and IDE (IntelliJ) do as much of the work and decision-making as possible on the part of the end developer.

"The OO Presentation": co-created a presentation on object-oriented design, how to read UML diagrams, and a bit about The Unified Process development cycle. Delivered the presentation to non-developer groups (reporting, DBAs, business analysts) in the department on an ongoing basis, to acquaint them with the motivation and process behind the developers' design decisions.

Co-chair, *CHOIR Communications Team*: elected to the communications team of the department-wide "CHOIR" advisory board. Communications team develops approaches to improve communication throughout the department, including the research of online collaboration tools, group outings to promote team-building, and best practices with regard to email and other online and offline communication. Proposed the idea of organizing full-day team volunteer outings to promote team-building, taking advantage of Time Warners's benefit of 5 salaried days available for volunteer work, which otherwise generally goes unused. Concept still in development.

Nominated for the 2007 *Heiskell Award* for excellence in volunteer work. Nominated for my work with the [St. Luke's Saturday School and New York Cares](#).

Helped implement the front-end of the *NQC* project (Network Quality Control), a Swing/Spring/Hibernate system that streamlines a highly detailed and stringent process for managing and screening all media assets that

enter the company, including integration with a third-party tape management system. Used Velocity templating engine to produce html reports on the fly. *Java 1.5, Swing, Spring, Hibernate, Velocity.*

Helped lead a reading group on "gang-of-four" Design Patterns, presenting and leading discussion of a number of patterns.

Researched object-oriented and post-relational databases and how they might be integrated into the existing enterprise, focusing on db4object. Research ongoing.

Researched online collaboration tools, including wikis and various proprietary products.

Designed and implemented the front-end for the *Tango* project, an invoicing system catering to multiple departments of the company. Contributed significantly to the analysis/design models and backend design. Made use of Jasper Reports to generate invoices as PDFs. *Java 1.5, Swing, Spring, Hibernate, Jasper Reports, UML.*

Editor/Co-author: department-wide best practices documents for Jakarta Struts and Java Server Faces web technologies.

Budget Year Admin web application: collected requirements, designed user interface, implemented web front-end using JSF (Java Server Faces). Application allows Finance department to control departmental yearly budgets and control access to the company-wide general ledger.

APL (Account Profit/Loss) Reconciliation project: programmatically reconciles Sales and Marketing user's orders with the company-wide General Ledger, making sure the two sides reconcile and facilitating the research of discrepancies for the Finance department. Collected requirements, designed user interface, architected, designed and implemented front and back end (Struts, EJB 2.0, JDBC/SQL, Oracle).

Ongoing development of the *HBO Common Library* (department-wide java library). Wrote HBO's custom

Java/Swing drag-and-drop framework, providing image-dragging and data flavor functionality within Java 1.2 and 1.3, and used in numerous applications department-wide.

Joined the *CCPI* project, a large-scale Swing/EJB 2.0/Oracle application used to manage operation of HBO's telemarketing incentive programs and contests. Did debugging as needed and wrote new functionality to meet a number of hard business-driven deadlines and deliver much complex functionality in little time. Worked on both client and server as needed.

Debugged and rewrote large portions of the *iBroadcast* project, a large-scale Swing/EJB 2.0/Oracle application used in Asia and Europe to control virtually all of HBO's overseas broadcasting operations, including tracking tapes and shipments, scheduling on-air programming and managing on-air interstitial content. Much refactoring was required because the project was originally outsourced, and proved unmaintainable in its original state. Also implemented many new features, client-side and server-side. Brought on to help the team meet a tight deadline.

Designed and implemented the *Sports Tape Logging* project, an EJB 2.0, JSP/Struts/SQL/Oracle web app acting as a conduit between the third-party Media Log videotape-logging application and our database. The app uses the Context InterMedia database indexing package to provide fast and flexible text-searching capabilities similar to that of a web search engine.

Helped design and develop the Swing client and developed parts of the EJB 1.1/Oracle server of the *New NOVA* project, a large enterprise/Weblogic 5.1 application intended to replace a legacy mainframe system that controls the authorization and descrambling of HBO's and other vendors' cable channels for distribution to a complex affiliate network.

Collected analysis requirements and co-designed the user interface of the *New NOVA* project. Developed numerous and extremely varied approaches to the GUI as the functional requirements of the system fluctuated. Made frequent presentations of the GUI to users as it developed

and changed, including prototypes written in Java/Swing, to determine front end usability. Authored extensive documentation of the GUI's behavior and of the functional requirements of the system.

Information Builders, Inc. *New York, NY*
Programmer June 1997 - August 1999

Debugged, extended and redesigned much of the front-end *Report Broker* product, a browser-based database report scheduler (subset of the WEBFOCUS package). Worked with Java, JDK 1.0 and 1.1, Cafe Pro, and FOCUS database language, all on NT. Rewrote parts of the backend report scheduler to use Java servlets and JDBC/SQL, and converted the existing FOCUS scheduling database to SQL.

Implemented the *Portable FOCUS* product, converting existing software to a multi-platform software package. Worked primarily in C, with conversion of and integration with FORTRAN code, and worked with FOCUS language. Worked on UNIX with use of CMS mainframe.

Helped implement the first international language-support version of *FOCUS for Windows*. Wrote sections of the front-end, and did general debugging (all work done in Visual C++, MFC).

Volunteer Work

Literacy Partners *New York, NY*
 Group Tutor (teacher) *Summer 2008 - present*

Completed Literacy Partners training and became a group tutor, teaching a math class one evening per week to adults working towards their GED.

New York Cares / Literacy Partners *New York, NY*
 Tutor *Spring 2008 - Summer 2008*

Tutored adults working towards their GED in math once per week. Often created true breakthroughs for students with

respect to their math skills and their appreciation of their own abilities and potential. During this time, trained with Literacy Partners to become a group tutor qualified to teach classes in math and English.

New York Cares / The St. Luke's Saturday School *New York, NY*

Team Leader *Fall 2006 - present*

Organize and lead a team of tutors on behalf of New York Cares to work at the St. Luke's Saturday School, a volunteer tutoring/education program based in Harlem. We work with children from elementary school through high school, focusing primarily on math and writing skills and on preparation for standardized tests like the SAT and high school qualification exams.

New York Cares *New York, NY*

Team Leader: New York Cares Day *Fall 2006*

Led a team of 20 volunteers on New York Cares Day, a citywide one-day volunteer effort in which we do maintenance work and try to beautify the city's schools and parks. Our team painted and did other maintenance work at an elementary school in Queens.

New York Cares *New York, NY*

Volunteer *January 2004 - present*

Volunteered periodically on weekend projects, focusing primarily on educating and promoting literacy among underprivileged children.

Freelance Work

The Beacon, NY (*work done remotely in New York, NY*)

Fire Lotus

TheFireLotus.com

Summer 2007

Implemented e-commerce site for The Fire Lotus, an importer of fine products from Thailand such as handbags, jewelry, and art objects. Integrated with Paypal for credit card checkout, including IPN callback to automatically

maintain product inventory in the database. Wrote custom administration control panel for the owner of the store to maintain his inventory. *HTML/CSS, AJAX, Ruby on Rails, Paypal integration using the ActiveMerchant Rails plugin.*

Riverdale, NY (work done remotely in New York, NY)

Matthew Locricchio

MatthewLocricchio.com

Spring 2006

Designed and implemented website for internationally acclaimed children's cookbook author Matthew Locricchio, showcasing his International Cookbook For Kids and his Superchef series of books. Includes a database-driven "Upcoming Events" page with a user-controlled administration interface. Did all visual design and technical implementation including Flash animation. *Flash 8, HTML/CSS, PHP/MySQL/Apache + mod_rewrite, much photoshop and scanning work.*

Tarrytown, NY (work done remotely in New York, NY)

Marshall Cavendish

Image Library

October 2005 - March 2006

Designed and implemented a web-based searchable image library for book publisher [Marshall Cavendish](#), structuring and streamlining the company's workflow in selecting royalty-free images for books in the making.

Administrators categorize and tag images with keywords and other meta-data, researchers search and browse the library and collect promising images into "lightbox", and editors download full-resolution versions of the images for use in publication. Website is password-protected and unavailable for public display. *HTML/CSS/Javascript, PHP, MySQL, Apache, mod_rewrite, ImageMagick.*

Other Experience

The Michael Group

New York, NY

Director

2001 - 2002

Worked with theater group The Michael Group as director, helping actors develop scenes and monologues for showcases.

Theater classes with Gene Lesser *New York, NY*Student, assistant *1998 - 2002*

Studied acting and directing theater under director Gene Lesser, formerly a teacher at Julliard, Carnegie Mellon. Studied acting, then later directing, assisting in the classes by directing student scenes.

The Binghamton Crosbys *Binghamton University, Binghamton, NY*Music Director *August 1996 - May 1997*

Directed and conducted the 15-man a-cappella group. Led the group to national recognition (top 10 in the country). Had an original arrangement performed by the group at Carnegie Hall, and still send arrangements back to the group on occasion.

Education

Master's level classes in computer science at Columbia University, to be applied to a degree.

BA English Literature, Binghamton University, 1997 (Binghamton, NY).

Other Interests / Hobbies

Photography, music, writing, theater (acting, directing, playwriting), computer science, tennis, dancing, improv comedy.

Pet Projects

defpred: a Common-Lisp program that compiles
prolog-like predicates into procedural Common Lisp code

scheme->php (planned): compiles Scheme code into php,
hopefully allowing easier and cheaper use of lisp in general
web development.

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