CHRISTIAN RYAN CAPERTON

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More than 11 years of software development experience, including software applications, web applications, and backend systems design. Excellent written and interpersonal verbal skills. Extensive and varied knowledge and experience, including:

- Java: 9 years
- JSP (with JSTL) and Servlets: 6 years
- Spring: Injection 2 years, Model vs. View 1 year
- Unit Testing (JUnit & Easy Mock): 4 years
- Perl (cgi, mod_perl, OO): 8 years
- SQL (Oracle, MySQL, Postgresql): 8 years
- Continuous Build Integration: 3 years
- Content Management Systems (CVS, SVN, Perforce): 6 years
- Iterative Release Cycles with Scrum/Agile: 4 years
- C++: 4 years
- C: 2 years
- HTML/Javascript/CSS: 9 years
- XML (DOM and SAX parsing models): 6 years

EXPERIENCE

Element 115, LLC.   **Chicago, IL**
Web content management solutions for public and internal web sites

Senior Systems Architect
12/09 – Present
- Design and architect Java based solutions to the Fatwire Content Management Server API for synchronizing external databases to Fatwire's template based modeling for client web portals.
- Develop a comments and a Questions and Answer DWR (direct web remoting) web applications that can be inserted into a web page through a javascript tag.
- Introduce and enforce a novice team to better coding and design practices that include SVN, code reviews, Unit Testing, and daily status meetings.

Google, Inc.   **Chicago, IL**
Internet search and ad services developer and provider

Software Engineer
3/08 – 11/09
- Implemented a system that synchronizes bi-directional data between legacy Oracle databases and Google BigTable/MegaStore databases. The system involves data mapping, computation, and aggregation; AppWorx for "cron'ing" jobs on legacy systems for data migration; data loaders on Google stack; domain object creation; domain objects translation into Google protocol buffers; object verification and logging of bad data; and persistent data storage. Google borgmon is used for triggering alerts for 24/7 data monitoring. Over 45 million records a day are synchronized through this system. This data synchronization team involves 12 engineers, distributed over three offices.
- Participate in Google's software engineer code reviews, reviewing 4-6 perforce change lists of code submissions per week, involving all aspects (data synchronization, front end user interface design, API design) of the larger team project.
- Participate in team's bug fix effort where each individual's goal is to claim and fix one system bug per day.
- Participate in production code deployment, involving binary distribution to Google's distributed server environment (the borg), write the borgcron config files that control job resources in the borg, and write the borgmon monitors that trigger alerts of the jobs running in the borg.
- Share duties in team on call rotation to provide 24/7 support of our services.

DoubleClick, Inc.   **Chicago, IL**
Developer and provider of internet ad services

Software Engineer
5/07 – 3/08
- Principal designer of a distributed database synchronization system using Perl for our clicks/redirect servers. This system distributed data to over twenty databases, daily synching over a million product records with landing page information, where the up/down status of a database was not known at any given time. The system allowed automatic data recovery when databases come back online. The system serviced tens of millions of customer clicks a day.

- Assisted in development of a system that takes client product catalogs of consumer goods, stores the product information in an internal database, translates each client's product information to a publisher engine, and delivers the translated product information to each publisher for shopping comparison engines. Additionally, this involved the development of a web interface for clients and agencies to support their own data and publishing configurations. The back end system was written in Java using Spring injection dependency, interfaced with MySQL, DB2, and Oracle databases, supported millions of products flowing through the system on a daily basis. I was a member of a team that grew to a size of seven, using Scrum development methodology, unit testing, continuous build, and iterative development principals.

MusicNow/AOL MusicNow (acquired by AOL in November 2005)   **Chicago, IL**
An online digital media service providing both audio and video for purchase or subscription models

Senior Software Engineer
9/04 – 4/07
- Principal engineer that implemented an automated royalty reporting system based in OO Perl that created custom financial reports for more than a thousand licensors in MusicNow's music service. This automated system included report delivery via FTP or e-mail attachment, notification of report delivery via e-mail, and archiving the reports and associated metadata via PL/SQL functions to a web portal server for historical retrieval. The automation of report generation and delivery occurred weekly, monthly, and quarterly.
- Implemented a royalty system based in OO Perl that extracted all digital media plays (audio/video media types, purchase/ computer/portable plays) from a data warehouse to calculate costs and then generate the royalty bearing financial figures, per licensor, based on a complex system of financial dependencies outlined by each licensor.
- Implemented a billing system for digital media purchases, new account signups, and batch systems for both subscription renewals and billing period ending dates. This billing system included credit card, debit card, and checking account based transactions. This was built as a mixture of PL/SQL functions and Java classes embedded as PL/SQL functions and communicated to a third-party credit card processing agent via XML messages.
- Principal engineer that implemented a Java XML parsing tool to dynamically create DMCA compliant radio stations based on availability of songs in the service's library and sourced from the XML feed. Due to the large size of the XML files, yet constrained by the need to use a DOM parsing model for repeated, complex segments, a custom SAX/DOM hybrid parser was created.
- Assisted in ongoing development of a custom content management system for the service's digital media library. This included metadata scrubbing tools; automated tools for censoring of metadata for family oriented viewing; and tools to alias key metadata content (artist/album/song name). These tools were written in both CGI Perl and JSP.
- Implemented design and features to the GUI portion of our web service using Dynamo server's Java/JSP, JavaScript, and CSS.

Parity Systems, LTD   **Evanston, IL**
A provider and maintainer of data, financial contribution information, scholarship payout information, and PSAT scores for Rotary International's Rotary Foundation Scholarships

Senior Software Engineer
5/03 – 6/04
- Developed a Java Servlet web application to track scholarship payouts to students and customized search features.
- Developed a JSP web application to track institution and corporate donations for scholarship programs and provide institution searchable features and a personal notes interface.
- Designed architecture for an application that allowed custom scholarship forms to be uploaded by corporations to a central server, used online by potential student scholars, and searched and used by both corporations and a third-party scholarship judging team.
- Designed and implemented all project database structures and schemas using SQL.
- Researched system requirements, purchased systems, and installed/administered systems (RedHat Enterprise Linux and Debian Linux; MySQL; ODBC and AS/400 drivers; Tomcat; Apache) for all servers.

Information Resources, Inc.   **Chicago, IL**
A provider of market sales data of consumer product goods for both healthcare and retail organizations

Software Engineer
5/00 – 4/03
- Developed a syndicated web portal in mod_perl to deliver personal consumer goods statistics for a client base of more than 100 utilized by more than 10,000 users.

- Developed customized web applications on a per client basis using both mod_perl and CGI with Perl on Apache to deliver consumer goods statistics.
- Designed syndicated database schemas using Oracle to track consumer goods data on weekly, monthly, and quarterly periods.
- Developed Perl applications for in-house tools to automate batch processes that cover a complete data delivery system for reporting.
- Assisted clients' use of shared web server environment through code reviews of client applications.

GoodFood Productions   **Chicago, IL**
A consulting agency for designing web applications concentrated on working with nonprofits and arts organizations

Software Engineer
5/01 – 12/02
- Developed Java/XSL/XML-based web searchable engine for client's warehouse database to be used in store front customer kiosks.
- Developed a mod_perl web-based client front end data entry point for Trans American hunger study program.
- Designed a content management solution with a Flash based interface that drove back end Perl utilities.

Reuters Information Technology, Inc.   **Oak Brook, IL**
A provider of financial trading systems

Software Engineer
6/98 – 4/00
- Developed a C language API for transportation of real time and historical stock data.
- Developed a Java based API for accessing real time stock information data.
- Developed a C++ based API using Microsoft COM technology for accessing real time stock information data.
- Performed quality tests on API's and developed example applications as part of the licensing packages.
- Wrote scripts (Unix shells, Perl) and Makefiles to automate processes.
- Assisted with writing user reference manuals and developer guides using HTML and Microsoft HTMLHelp formats for the licensing packages.
- Investigated issues surrounding porting Reuters' main C API on Solaris platform to Linux platform and developed strategy plan for implementing this porting.

EDUCATION

The University of Texas at Austin
Bachelor of Science in Computer Science
May 1998

The University of Texas at Austin
Bachelor of Arts in English Literature, Minor in Mathematics
May 1995

CERTIFICATIONS

Sun Certified Java Programmer for Java 5.0
November 2007

RELATED SKILLS

- Strong experience with administration of Unix systems (Samba, Tomcat, Apache) and Unix scripting
- In-depth networking knowledge on Ethernet, token ring, TCP, UDP, IP, multicast, socket programming, client/server connections, and custom protocol implementation
- Experience with Ant as build/deployment agent
- Experience with Maven as build/deployment agent
- Primary experience with Eclipse, secondary experience with IntelliJ as IDE
- Experience with Agile/ExtremeProgramming/Scrum development methodologies

- Experience with paired programming
- Lover of vi