# CHRISTIAN RYAN CAPERTON

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Fifteen 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: 12 years
- JSP and Servlets: 9 years
- Spring: Injection- 4 years, MVC- 1 years
- Unit Testing (JUnit & Easy Mock): 7 years
- Amazon Web Services (EC2, EBS, ELB, EB, RDS including systems architecture, administration, API's, system recovery and fault tolerance): 2 years
- Linux administration and shell scripting: 16 years
- Perl (cgi, mod_perl, OO): 8 years

- SQL (Oracle, MySQL, Postgresql): 11 years
- Continuous Build Integration (Cruise Control, Jenkins): 5 years
- Content Management Systems (CVS, SVN, Perforce, Git): 9 years
- Iterative Release Cycles with Scrum/Agile: 7 years
- C++: 4 years
- C: 2 years
- HTML/Javascript/CSS: 12 years

## EXPERIENCE

**Company Name Hidden for Privacy Concerns**                                          **Chicago, IL**

Advertising agency for performance marketing services and technological solutions in the search engine marketing industry

*Senior Software Java Engineer*

11/10 – Present

- Design and implement a web portal solution using Liferay (open source Java enterprise portal) for managing bi-weekly reports for a regional and franchise hierarchy that also includes account administration launch tools and account sourcing from Salesforce for the local auto industry.
- Design and implement automated feed delivery reports of SEM data to multiple clients that include extract, transform, and load components.
- Design and implement a URL and tag checker utility that reports URL response and proper tag existence daily for millions of URL's and includes concurrency for scalability.
- Design and implement a SEM feed processor for Google SEM feed consumption of millions of records an hour that delivers data to a SQL Server database and archives feeds to S3 storage in AWS.
- Administrate and architect a robust production/staging/development system in AWS that spans AWS technologies covering EC2, EBS, S3, RDS (MySQL, SQLServer), SimpleDB, DynamoDB, Elastic Load Balancing, and Elastic Beanstalk, including API usage, and considers fault tolerance and quick system recovery through pilot light backups.
- Participate in team code reviews where every line of code is reviewed before code submission.
- Participate in story discoveries, story writing, internal and external demos as part of two week Scrum cycles.
- Mentor junior developers in alignment with team lead responsibilities.
- Work with other engineering divisions as QA for designing test cases and DevOps for systems design.
- Cut tags, manage builds, promote code through dev/staging/prod environments.
- Principal contact for 24/7 support of team services.

**Element 115, LLC.**                                                                  **Chicago, IL**

Web content management solutions for public and internal web sites

*Senior Systems Architect*

12/09 – 10/10

- Design and architect Java based backend and JSP solutions for the Fatwire Content Management Server API to build Fatwire's template based models for client web portals.
- Develop a Comments and a Q&A Servlet
- Mentor a junior team in best practices covering 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
- Implement a system that synchronizes bi-directional data between legacy Oracle databases and Google BigTable/MegaStore databases for SEM data. The system involves data mapping, computation, and aggregation; AppWorx for workflow concepts 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. System included data monitoring and alert triggers. Millions of records are synchronized through this system daily. 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, write config files that control job resources in the distributed application environment, and write monitors that trigger threshold alerts of the production jobs.
- 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 click/redirect servers. This system distributed data 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 using Spring MVC 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. This team included seven engineers, using Scrum development methodology, unit testing, continuous build, and iterative development principals.

**MusicNow/AOL MusicNow** (acquired by AOL 11/05)                                                             **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 contractually 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 digital solutions maintainer of donations, scholarship payments, and test scores for Rotary Foundation Scholarships

*Senior Software Engineer*
5/03 – 6/04

**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

**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

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

*Software Engineer*
6/98 – 4/00

## 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

## COMMUNITY SERVICE

March 2009 – Present
*Secretary and Troubled Buildings Representative for Irving Park Concerned Neighbors Association*
- Attend, facilitate, and take minutes of monthly community meetings.
- Represent community at Chicago police CAPS beat meeting and deliver summary of concerns.
- Work with district police commanders, troubled buildings officers, Aldermen, and Aldermen office representatives for anti crime measures in the sixteen block community area.