

Ryan Richards  
Norman, OK  
405-219-1472 | [ryan@r3hq.com](mailto:ryan@r3hq.com) | <http://r3hq.com>

## SUMMARY

Over ten years of being directly involved in the development of innovative and leading-edge software projects for financial, engineering and start-up markets. This experience was gained in both application development, and infrastructure-related fields. Primary focus over the past four years has been directed at ruby on rails development as well as the server-related technologies for scaling application under high demand. My experience with linux/unix servers, databases, and software development combined with a strong desire to succeed through the use of best-practices, solid architecture, and an exceptional work-ethic has enabled a deep understanding of the entire development landscape and development lifecycle.

## KEY PROJECTS

### **Alorus - Spreebird – current** (alorus project)

Served as lead server engineer and senior rails developer for existing rails 3 codebase. This environment was 100% cloud-based and used SCALR for dynamically managing scalability based on a number of factors. Routine tasks include rails development, refactoring, web design and performance analysis and recommendations for improvement. Responsibilities included on-call support 24/7 for production environment issues, configuration of server monitoring using CloudKick and creation of Capistrano deployment facility.

### **Alorus - Motovy.com – current** (alorus project)

Served as lead server engineer and senior rails developer for existing rails 3 codebase. Duties included configuring production server and databases for rails application as well as multiple development tasks for both front end design and backend logic. UI utilized jquery, haml and sass along with the 960 grid framework.

### **Alorus - CBI – current** (alorus project)

Served as rails developer focusing on UI/Ajax improvements with JQuery.

**G8wave, Inc** - October 2010 - December 2010 (remote / contract)  
<http://g8wave.com>

Served as lead server engineer and senior rails developer for existing rails 3 codebase. This project required very fast comprehension for gaining awareness of the existing codebase and server configurations. Routine tasks include rails development, refactoring, web design and performance analysis and recommendations for improvement. Responsibilities included on-call support 24/7 for production environment issues.

**Grasshopper Labs** - August 2010 to November 2010 - (remote / contract)  
<http://chargify.com>

Served as remote rails developer and server engineer in a distributed team. Primary responsibilities included being the technical lead for implementing a PCI compliant server environment for multiple rails projects as well as developing features in the core application and performance tuning. Worked with vendor to setup and configure PCI compliant server environment for staging and production. This involved evaluating the previous production environment and making recommendations for improvements in regards to performance. Other tasks included building/installing and configuring these systems in the new environments and working with the vendor's engineering team to transfer knowledge of how these systems worked (such as nginx, passenger, monit, and delayed\_job).

**Freedomsoft** - August 2009 to 2011 - (remote / contract)  
<http://freedomsoft.com>  
<http://contractcrusher.net>

Senior rails developer for front-end and back-end applications including domain registration wizard with auto configuration for personalized domains and websites within the application. Other development including refactoring existing code and advising on best-practices in regards to development and process for team. Wrote api wrappers for api services being used inside the application. Wrote code to integrate with google maps, and microsoft Bing maps services. Led the effort on tuning existing code using new relic and metric\_fu resources. Design patterns and best-practices were adhered to and recommended for all work. Tests were written using rspec and cucumber.

Architected and built production environment (10+ servers). This environment included haproxy clusters for managing load across 4 servers. Load balancers were configured with heartbeat for failover, and mysql master-slave replication spread across multiple servers was the primary datasource. Chef server was used for a subset of configuration management with chef-clients running on all servers. Munin and collectd were used for metrics analysis. Nagios was the primary monitoring application and was used for all servers. Backups primarily relied on vendor backup services and duplicity backups scripted for use with amazon s3.

**AppAdvice** - May 2009 to August 2009 (remote / contract)

<http://appadvice.com>

Served as remote senior rails developer and server engineer for multiple application environment. Several of these applications worked collectively to support specific high traffic services including iphone REST communication as well as Apple Push Notifications. These included both internal and customer-facing sites with a daily hit count of approximately 40,000 requests. Amazon SQS, S3, and EC2 were used for data and messaging requirements. Front-end work utilized HAML, SASS and JQuery for all deliverables.

Server engineering tasks included slice configuration for multiple staging & production rails environments. Other tasks included production wordpress and mysql migrations, performance analysis and improvements.

**Art+Culture, NY,SF** - September 2007 to September 2008 (contract)

<http://artandculture.com>

Served as lead rails developer and server engineer for a media-intensive site containing music, art and culture related content using ruby on rails framework 2.1 with mysql and prototype/scriptaculous. Primary responsibilities included configuration of multi-environment engineyard slices. Configuration and tuning of memcached, sphinx search + ultrasphinx, git repositories on github, nginx, mongrel clusters, capistrano 2 including custom task implementations. Multiple ec2 instances with associated s3 backup script implementation as well as monitoring for all services listed are primary duties.

Strong rails and web design skills with css and javascript were required on this project including cross-browser compatibility for Firefox 2/3, Safari 3 and Internet Explorer 6 & 7. Performance and infrastructure knowledge with linux (gentoo), mysql, and mem-

cached for caching were critical. Testing was considered imperative and utilized the rspec framework. Primary tools used on this project included textmate for coding, photoshop cs3 design premium for web graphics, cruisecontrol.rb (modified for git), rcov, mingle2, selenium for view testing. Unobtrusive javascript was the preferred method of implementing ajax-related actions. Continuous refactoring was always encouraged.

### **PricewaterhouseCoopers LLP - March 2004 to March 2007**

Lead and Senior Developer roles for large-scale web applications serving 30,000 employees. Applications functionally supported ethics and compliance for accounting consultants in regards to accounting, IRS and security regulations.

All applications used design patterns and were implemented with performance considerations on clustered weblogic domains. Application architecture utilized J2EE, stateless EJB, Spring, and Hibernate on a Sun Solaris platform with Oracle as the persistence mechanism. JUnit, Cruise Control and Perforce were used together for SCM and automated testing of code from both US and offshore-based development teams. Managed onshore and offshore team of developers. Worked heavily in architecture for project. Lead code review meetings for all development. Designed and implemented code for various parts of projects including MVC-based web, middle and persistence tier as well as integration solutions using both Weblogic Integration and OpenSymphony OS-Workflow. Spring and Hibernate were used for AOP aspects - cross-cutting concerns and method interceptions for caching in hibernate/ehcache. Developed scripts for development ( j2ee ) scm and various automation tasks. Developed Rails web-applications for meeting content system.

### **PricewaterhouseCoopers LLP - May 2003 to March 2004 - Lead middleware engineer**

Lead weblogic administrator and j2ee developer for all middleware projects using both BEA Weblogic server and BEA Integration 7.0 Sp2 and 8.1.2. This environment utilized Sun Solaris 2.8 and Oracle 8.1.4.7. Responsibilities included working with various teams to produce a stable, clustered, and flexible infrastructure for J2EE deployments including application integrations with SAP & PeopleSoft. Deployments were made across several clustered domains while enforcing strict compliance to deployment standards while monitoring the performance and availability of all environments. Kintana 5.0 and PVCS were used to automate the deployment process when possible. Perl and Korn shell were used to maintain server-side administration processes. Created proce-

dures, best practices, and training materials to mentor other members of the team in weblogic and java/j2ee concepts. Time estimates and project planning were required for all activities.

**AtkinsBenham, inc.** - November 2000 to February 2002 - Senior Software Developer

Architected, developed and implemented java application for parsing and loading GIS spatial data for a large city agency into an Oracle spatial database. This database utilized the object-relations database model. This application utilized Java and XML technology, EJB, JDBC, Swing, JSP, servlets, JAXP (DOM and SAX). Architected and developed proof of concept applications using SOAP web services for Java and Visual Basic interoperability. Architected and developed java applications to interface GIS data with Bentley ISpatial GIS analysis systems. The applications listed above ran with Oracle 8.1.6 and Oracle 8.1.7 enterprise spatial databases with Oracle 9i Application Server (enterprise) 1.0.2.2.1 including OC4J on Sun SPARC Solaris 2.8. Architected and developed proof of concept applications utilizing OpenGL for water and surface modeling using Microsoft Visual C++ on a Windows NT environment. Tools used for development and architecture included Together Soft ControlCenter 5.5 for CASE, and OOAD design with UML modeling.

**ThinkSpark** October 1999 to November 2000

**Technical Consultant**

Designed and built web applications using Java applets and Oracle web reports for large energy company and provided DBA services for customers. Designed and developed small internal web-applications using java (JSP/servlets and Oracle BC4J). Tools used for java projects included Oracle JDeveloper, Borland JBuilder, and various unix editors. Developed client-side and server-side stored packages including procedures, functions and triggers using Oracle PL/SQL for various applications used in a large state agency. These applications utilized Oracle Forms (Oracle Forms 4.5 and Forms 5.0) and Oracle Reports (Oracle Reports 2.5). Systems used for various development efforts were Oracle 7.3.4 on Windows NT, 7.3.4 on Solaris 2.6 (SPARC), Oracle 8.0.4 Enterprise on Solaris 2.6 (SPARC), Oracle 8.1.5, and 8.1.6 on both Solaris 2.7 and 2.8. Served as primary and secondary Oracle DBA and UNIX administrator on various projects. These tasks included Sun Solaris (SPARC) installation and configuration, Oracle database installation and configuration, Oracle tools (i.e. Oracle Application Server, Oracle Reports, OEM) installation and configuration. Administration scripts were created

using bourne shell, korn shell and PERL 5. Excellent communication and customer service with customers and management was crucial for the success of these projects.

## **Education**

University of Central Oklahoma - Bachelors Information Systems + computer science

Oracle Education - Development of PL/SQL Program Units, Dallas TX,

Oracle Education - Enterprise DBA Workshop, Oklahoma City, OK,

Oracle Education - Develop Database Applications with Oracle JDeveloper, Oklahoma City, OK

Sun Education - Object-Oriented Analysis and Design using Java and the UML, Chicago IL

Rational University - Introduction to Clear Case, Basics of Clear Quest (on-site - Oklahoma City, OK)

BEA Education Services - BEA WebLogic 7.0 Administration, Irving TX

Various industry events i.e. JavaOne, RedDirtRubyConf