

Brian McQuay
http://www.brianmcquay.com

brian@onomojo.com
808-699-0632

Education

MS Computer Science, University of Central Florida,
GPA 3.3, Dec. 2005
BS Computer Science, University of Central Florida,
GPA 3.5, August 2003

Languages

Ruby, PHP, Python, Perl, Java, C, C++, C#, LISP, ColdFusion, JavaScript, BASH, SH

Operating Systems

Linux (Gentoo, Debian, Redhat, SUSE), Solaris, Windows, DOS

Databases

MySQL, PostgreSQL, MS SQL Server

Miscellaneous

Ruby on Rails, Apache, HTML, XML, CSS, MVC, .NET, SQL, UML, JNI, ASP.NET, AJAX,
Gentoo Linux

Professional Experience

October 2006 – Present

Owner, Onomojo.com LLC, <http://onomojo.com>

- Conducted SEO, online marketing, and web development for various clients

October 2006 – Present

Owner, Webster's Classroom, <http://webstersclassroom.com> - Ruby on Rails

- Designed and developed a site that allows teachers to easily create their own personal webpage to communicate with parents and students
- Worked closely with teachers and parents in the community to build them the tools they needed

January 2007 – September 2007

Project manager, Peek-A-Boo Paradise - Ruby on Rails

- Coordinate development between 2 developers, 1 graphics designer, and owners
- Designed and developed the core website architecture with SEO in mind
- Manage all online marketing including CPC ad campaigns
- Setup and maintain Gentoo linux servers for the development and our live website
- Internationalized the site by designing and developing an automated translation plugin

December 2006 – November 2007

Project manager, Tiny Surfer, <http://TinySurfer.com> - Ruby on Rails

- Setup Linux servers for production, staging, and development

- Managed a contracted system administrator
- Designed and developed an international vacation rental website (<http://tinysurfer.com>)
- Worked closely with graphics designer, owner, and marketing manager to develop the site
- Implemented cutting edge SEO and architected the system to easily scale horizontally across multiple products

March 2006 – December 2006

Senior software developer, Hawaiian Beach Rentals, <http://hawaiianbeachrentals.com> - PHP

- Improved productivity and organization by instituting a software lifecycle (code was hacked on a live production site previously)
- Setup and maintained Subversion and a ticket tracking system (Trac)
- Designed and developed an open source Trac plugin to automate publishing of tickets/code to our staging and production environments
- Acted as the content manager for the code repository and coordinated all branch merges
- Built Linux servers from the ground up including setting up the hardware, software, configuration, and maintenance
- Integrated Altigen VOIP system with custom reports to monitor telephone activity which resulted in a 40% increase in the number of answered sales calls
- Programmed a reporting interface that related website traffic statistics to sales data (similar to Google Analytics but more proprietary)
- Vastly improved security by:
 - rewriting the entire application with register globals off (PHP),
 - not storing plaintext passwords in sessions, cookies, or the database
 - closing open remote software exploits
 - rewriting parts of the proprietary website framework to prevent SQL injection
- Virtualized 7 Gentoo Linux servers using XenSource
- Relocated production server in-house saving the company over \$18,000 annually

June 2005 – January 2006

Tools Engineer and developer trainer, Science Applications International Corporation - RoR

- Maintained existing IDE for the JMPS-SEIC project
- Researched web frameworks and MVC design pattern for a rewrite of the internal IDE
- Wrote a prototype in Ruby on Rails
- Key member of the IDE redesign architecture team
- Principle database architect for the new IDE
- Setup and added features to a wiki and ticket tracking web application, Trac
- Trained other developers on the JPS framework

May 2002 – May 2005

Research Assistant, NSA funded project at UCF - Java

- Created a genetic algorithm using radar simulator statistics as a fitness function, to evolve teams of sensors to detect enemy radar.
- Wrote a primitive radar simulator
- Programmed a GUI in Java to display radar simulation and statistics.
- Researched varying mutation strategies, changing environments, and team building using the GA.

August 2003 – December 2004

Systems Programmer, Office of Research at University of Central Florida – C#

- Chief architect and programmer for a university-wide intellectual property management web application
- Interfaced closely with the customer to get requirements specification

August 2003 – May 2004

Teaching Assistant, Computer Science Department at University of Central Florida

- Responsible for teaching weekly recitation on Introduction to Discrete Structures and Computer Science 3.
- Assessed students by grading homeworks, quizzes, and tests.

July 2000 – November 2001

Web Designer, Course Development and Web Services at University of Central Florida

- Worked with professors and instructional designers to create, update, and maintain course web sites via WebCT.
- Helped students, faculty, and staff troubleshoot and use Internet dial-up software.

Other Interests and Capabilities

SEO, Online marketing, CPC management, Web development trends, Social Networking, Evolutionary Computation, Complex Systems, machine learning, peer-to-peer networks, security

Publications

Citations available upon request

Open Source Projects

Desko

Delicious tagger Wordpress plugin

Publish/Revert Trac plugin