### ZACHARY D. BURNHAM

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### **Skills Summary**

PHP development (Zend Certified Engineer)	6 years
Zend Framework 1 and 2	4 years
LAMP platform web development (Linux, MySQL, PHP, Apache)	6 years
AJAX	3 years
HTML, Javascript, CSS	8 years
jQuery	4 years
Apache Administration	6 years
Shell Scripting	4 years
Linux Administration	6 years
Web Development	7 years
Unit testing (PHPUnit)	1 year
PCI Compliance	2 years

The above experience levels include professional work as well as independent study and investigation.

### Career Highlights

Zend Certified Engineer

Technical Editor, php|architect magazine

Open Source Contributor, Zend Framework 1, Zend Framework 2, Phergie IRC bot

Open Source Project Creator, RedditBotAlpha Zend Framework 2 module, GithubBrag Wordpress plugin

Github: https://github.com/zburnham

Conferences: Zendcon 2008-2010, 2012; phpltek 2008-2012, speaker 2011

## Portfolio

## Recent projects:

### Duke Energy automatic account creation and single-sign-on

Zend Framework 2-based modules to provide security tokens via a web service, for inclusion when Duke Energy pushes data to our site with a customer's information. Validation, mapping of data fields to existing e-commerce database. Automatic sign-in of repeat visitors. Supervised freelance developers to complete projects within demanding time-frame. Custom handling of validation error notification both to the user and to Duke Energy. Modification of existing functionality within e-commerce application to meet requirements of Duke's RFP. Skills used: HTML, OO PHP, Zend Framework 2, MySQL, Javascript, CSS, shell scripting, Apache.

# $\textbf{Energy Federation Incorporated e-commerce storefronts} \ (\underline{www.energy federation.org})$

Customer-facing osCommerce-based e-commerce site with over \$2M in revenue annually. Responsible for all aspects of site administration, including database administration (MySQL/phpMyAdmin), creation of new storefronts for partner utilities (currently numbering over 100), maintenance of Subversion software repository and code branches, processing of utility customer information regarding security and authentication, maintenance of confidentiality of customer personally identifiable information and credit card processing information, and interaction with co-workers to export information to legacy inventory and order systems. Skills used: HTML, OO PHP, MySQL, Javascript, CSS, shell scripting, Apache.

# Seattle City Light kit giveaway site (http://seattle.efi.org) Ameren Illinois Actonenergy bulb giveaway site (http://actonenergy.efi.org)

Customer-facing Zend Framework-based sites to allow consumers to register for free lighting kits, sponsored by the Seattle City Light electric utility. Functionality allows for validation of entered information and comparison with pre-loaded

database of eligible customers. Administrative interface also created to allow for statistical reporting. Skills used: HTML, OOP, MySQL, Zend Framework, Apache administration, Linux configuration, Javascript, CSS.

ARRA "Cash for Clunkers" appliance rebate online applications (http://nmarp.efi.org, http://teearp.efi.org)

Customer-facing Zend Framework-based sites to allow consumers to register for rebates on the purchase of energy-efficient home appliances. Functionality allows for secure collection of consumer information, as well as validation and processing of applications by EFI personnel once paper applications have been received. Skills used: **HTML**, **OO PHP**, **MySQL**, **Zend Framework**, **Javascript**, **CSS**, **jQuery**.

### Energy Federation Incorporated grants application (grants.efi.org)

Customer-facing web application allowing for members of the public to apply for periodic grants provided by EFI to promote energy conservation and conservation products. Zend Framework-based web application. Functionality allows for users to register, edit applications, and submit them for approval, as well as allowing administration to review the applications for approval. Skills used: HTML, OO PHP, MySQL, Javascript, CSS, Apache, Zend Framework.

#### Objective

To continue to work in the field of web development while utilizing my current skills and developing new ones.

### **Experience**

November 2007-Present **Web Developer** 

**Energy Federation Incorporated** 

Westborough, MA

Responsible for all aspects of EFI's consumer-facing E-commerce website based on osCommerce. Reporting to the Director of the Consumer Division of EFI. Maintenance and upkeep of existing site. Feature additions and bugfixes performed at direction of the Director and other senior management. Additions utilize industry standard techniques such as object orientation, Subversion version control (and later conversion to Git), unit testing with PHPUnit. Creation of independent sites pursuant to EFI goals and missions. Administration of database information regarding partner utilities' customer account numbers and other sensitive information. Working with co-workers and management to identify areas for enhancement and future platforms, as well as leveraging new media and technologies such as Twitter and Facebook. Web platform based on Red Hat Enterprise Linux, Apache, PHP 5, MySQL 5. Maintenance of relationship with managed hosting (Rackspace), including decisions regarding upgrades to PHP and MySQL. PCI security evaluation, testing, and remediation.

January 2007-November 2007 **Lead Research Engineer**  **Process Software** 

Framingham, MA

Responsible for all spyware research efforts associated with the SpyCatcher product, with two direct reports. Reporting directly to the CEO. Maintenance and ultimate responsibility for highly visible, customer-facing business processes that generate and distribute spyware definitions. Enhancement of Perl, PHP and shell script-based custom web application used to generate spyware definitions. Authoring new AJAX/PHP/MySQL-based QA web application to ensure quality of updates. Maintenance of mission-critical, pre-existing spyware fingerprint database. Administration of VMWare-based virtual machines used for testing spyware, generating fingerprints, and verifying quality and integrity of final product. Administration of FreeBSD-based servers housing fingerprint database, including backup schemes. Enhancement of existing processes to remove redundant information and save bandwidth for enterprise customers. Verification of integrity and accuracy of generated fingerprint updates. Whitelisting of known non-malicious applications to lower false positive alerts. Sole technical representative to Anti-Spyware Coalition, a trade group composed of industry leaders such as Google, McAfee, Symantec, and WebRoot. Collaboration with other engineering team members to identify bugs, suggest new features, and plan enhancements to improve the quality of the product.

July 2006-November 2006

**Global Technology Conferences** 

Newton, MA

# Programmer/IT Manager/Systems Administrator

Served as single point of accountability for IT department in globally-scoped trade show organizing company specializing in Digital Signal Processing promotions. Held primary responsibility of maintaining, enhancing and extending underlying PHP/MySQL based code of company web site at http://www.gspx.com. Worked within design created by other employees to create convenient, functional site including registration processing and materials review. Administered databases to maintain relevance and synchronization. Wrote custom Perl scripts for a variety of purposes, from database maintenance to automatic mailing list updates to backups. Ensured that mission-critical data was accurately and automatically backed up through robust backup strategy. Sought most cost-effective solutions to business challenges through use of Open Source operating systems and software, including Fedora Core Linux, Apache, Perl, PHP, cron, rsync, and others. Interacted with vendors to address challenges and reach solutions. Established patterns of productivity while working remotely.

December 2005-June 2006 (contract) **Operations Technician** 

**Workforce Logic** 

**Google Book Search** Southboro, MA

Contributed to the Harvard University Wiedner Library book scanning project for Google Book Search. Maintained multiple cutting-edge Red Hat Linux-based workstations in a high-pressure production environment. Gathered and coordinated operator input to correctly diagnose technical failures. Worked independently to resolve technical issues, and as part of a team to predict and avoid future problems. Replaced server and peripheral hardware when deemed necessary. Calibrated precision equipment using standardized procedures. Installed and configured Ubuntu Linux-based desktop systems. Configured systems to work within a private high-speed data network connected to the Google headquarters in Mountain View, CA. Authored Java-based problem tracking system running on Apache Tomcat web application server. Coordinated with managerial and engineering personnel to address ongoing challenges and future expansion.

December 2004-November 2005 (contract) **Field Engineer** 

Compucom

Staples Corporate Framingham, MA

Built, configured and installed corporate desktop and laptop computers. Worked with Staples employees to determine migration strategy for existing machines and configuration for computers for new and existing employees. Checked in all new hardware received at Staples corporate headquarters intended for desktop usage. Maintained installation process recording in Remedy ticketing system. Followed detailed procedures issued by Staples PC group regarding migration of user data to new computers. Configured networking hardware to function on Staples' network.

### Education

University of Massachusetts at Amherst, graduation date May 1995. B.S., Exercise Science, (final cumulative average 3.78)