

Aaron Eiche

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Github: [aaroneiche/aeichepdx](https://github.com/aaroneiche/aeichepdx)

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Summary:

Software Application Engineer with over 10 years of experience in Web Applications, Embedded Firmware, Cloud Services and API development.

Tools and Experience:

- Object-Oriented analysis and design in multiple languages.
- Web Development - Front-end, User Interface, and Server-side components.
- Embedded hardware development on 8-bit AVR, and 32-ARM Microcontrollers.
- MVC paradigm
- Standards-based browser coding with focus towards compatibility.
- Git, Subversion version control systems
- Eclipse, IntelliJ, QtCreator
- Deployment and Configuration Management
- Apache server management, configuration
- SOAP and REST remote services design and development.
- Agile and Scrum environments.

Languages and Libraries:

- PHP
- Python
- Javascript (NodeJS, ES5, ES6)
- JavaScript Libraries: Prototype, jQuery, AngularJS, React
- HTML 5, CSS 3, SASS, LESS
- MySQL, SQLite, SQL
- C
- Qt, QML

Professional Experience:

Lead Javascript Engineer

Jaguar Land Rover

Portland, OR

March 2014 - Current

- Developed Applications for In-Vehicle Infotainment Systems, including concept, design, layout, interaction models, code, and delivery. Developed for open source and proprietary platforms. Projects included Weather, News, Media Playback, HVAC using web technologies (HTML5, Javascript, CSS) as well as Qt, QML
- Designed and implemented early APIs for RVI (Remote Vehicle Interaction) for remote HVAC control.
- Built internal asset management software, utilizing a REST API and web-based interface. Created both backend service and front-end client.
- Mentored developers in skills and business behaviors, assisting in code review, professional development, and industry-wide interactions.
- Initiated efforts to improve development resources, and team interaction, designing and introducing version control workflows, and methodologies for code review processes.

- Interacted and contributed to GENIVI and Automotive Grade Linux industry trade groups, participating to codify standards, and provide example implementations for those standards.
- Led development team for internal vehicle sharing web app written with NodeJS. Developed REST API for
- Worked with incubator and collaborator companies CarFit and EggCyte developing integration software and firmware for embedded devices. Provided
- Ported software from HTML5/Javascript applications to Qt with QML.
- Built an Amazon Echo demo to interact with a vehicle HVAC system, conceived and implemented in under one week.
- Developed Front-end and supported Application services development for open source Media Manager and Player for Infotainment systems.
- Built site generator for framework documentation

UI Engineer

October-March 2014

Act-On Software

Beaverton, OR

- Updated software components to divide view and model components from using old integrated JSP pages to pure HTML/AJAX populated displays. Templating done with Handlebars, comms in jQuery.
- Worked with QA and Customer Service teams to fix to fix bugs in applications and respond timely to customer complaints. Used JIRA for issue and progress tracking.
- Worked in an Agile development methodology with a Scrum team daily to appraise progress and determine development paths. Worked this system for feature development as well as a classical dev environment for handling bugs.
- Worked with App Experience director to determine overall look and feel and to apply those changes broadly to existing app as well as introduce it to new features.

Web Developer

August-Sept 2013

EdgeLink contract at CMD

Portland, OR

- Developed website for displaying sweepstakes opportunities and encouraging users to donate to cancer research.
 - Wrote MySQL backend data-storage and retrieval methods of sweepstakes prizes. Included logic for checking for duplicate entries, and other error-checking. Established logic to prevent system abuse.
 - Wrote front-end presentation with dynamic display of sweepstakes prizes, sorting and filtering using Javascript. Wrote methods to carry sorting and filtering relaying data between javascript on front-end and PHP in the backend throughout the session.
 - Acted as technical consultant to provide time estimates for features
 - Wrote delayed email system, which would store necessary information and send email in delayed timeframe.
 - Responded to client concerns and worked with design and UX team to resolve issues.

Web Developer

March 2013 – July 2013

TekSystems Contract at Jive Software

Portland, OR

- Worked in a team environment to develop, test, and deploy custom solutions in and out of Wordpress CMS for content management.
- Collaborated on large-scale corporate rebrand and communication for 3rd party public resources including NASDAQ, Jobvite, and EEG for managing offsite services.
- Wrote Front-End Javascript for managing display of relevant contact information dependent on region.

- Wrote SASS to streamline CSS rules and structure.

Professional Services Technical Consultant

July 2011 – March 2013

Huron Consulting Group
Beaverton, OR

- Consulted on interface and workflow designs. Took customer practices and designed and developed them into functioning interfaces.
- Designed and wrote custom logic for identifying and notifying compliance with government regulations for insurance coverage.
- Wrote custom web interface for requesting and retrieving sensitive patient medical data between research facility systems. Parsed XML data into custom structures and provided interface for editing.
- Wrote custom interfaces in HTML5 using custom data-storage attributes inline to provide contextual information for dynamic client-server interactions.
- Worked on projects with daily reporting and task assignment in an Agile environment.
- Developed security methodology for managing internal developers and project managers with customer developers and managers allowing practical administration of projects access to appropriate parties.

Contract with State Dept. of Revenue

February 2011 - June 2011

Comsys/Experian (Manpower group)
Portland, OR

- System provided means for updating taxpayer information online without interaction with Dept representatives.
- Design utilized AJAX and DHTML technologies for
 - Fetching and submitting changes to DOR servers
 - Success and Error displays on server-side failures, invalid input, successful updates.
- Encapsulated functions. User could update any component (Address, Email, or phone numbers) leaving others untouched.
- Worked with Dept. team to expand design and implementation concepts.

Netbiz.com Inc. - Web Developer

October 2008 - October 2010

Internet Marketing and Products Company
Tualatin, OR

- Designed and built a custom shopping cart web application to integrate with existing system.
 - Built cart administrative UI. Server /Client interactions handled by AJAX utilizing custom javascript and Prototype.js. Interface dynamically managed by DHTML for aesthetics, and functionality.
 - Server-side backend built on Object Oriented PHP and MySQL. Encapsulation and extension made priorities
 - Managed QA for cart system.
 - Managed System permissions and accessibility for cart component.
- Extended and rewrote components of internal sales management application and interface with Object Oriented PHP. This included restructuring and rewriting components for activities such as Sales Analysis, User assignment to sales areas, and automated removal and notification of sales personnel.
 - Used multiple OS development environment daily, including Linux (CentOS), Windows, and Mac OS X.
 - Responsible for access and permission configuration for Shopping Cart component.

PhotoLoom.com - Web Developer

September 2008

Online Genealogy Services Company

Freelance

- Extended existing server Technology which interacted with client application. Components were written in object-oriented PHP, built for extension, flexibility.
 - Wrote component for processing payments with popular payment gateway (authorize.net) using provided API.
 - Wrote User Account management database + User Interface
 - Wrote Invite-a-friend component.

Software Solutions - Web Developer

March 2006 - August 2008

Independent Bookstore Internet services & thingstodo.com

Sandy, UT

- Developed custom Content Management System (CMS) web application for newsletter creation and distribution.
 - Server-side system stored values and translated data into final newsletter form. Newsletter could then be automatically pushed to 3rd-party software via their API in OOPHP.
 - Design UI that allowed for multi-level editing and output control. DHTML and Javascript used for editor functionality and finesse. AJAX moved data between UI and Server.
- Wrote replacement CMS web application for large, FrontPage-based website. Maintained the existing look and feel while producing dynamically rendered pages.
- Developed and implemented an XML-based HTML generation Tool
 - Tool took XML data, and produced HTML from a template.

Additional Experience:

Open Source Project - Do Want – Web Gift Registry

October 2010 - Current

Lead Developer – <https://github.com/aaroneiche/do-want> – In Development

- Managed project development making design decisions and feature inclusion decisions
- Wrote Server-side components in scalable, Object-oriented PHP for API-based access.
- Implemented HTML5-structured Bootstrap as foundational front-end system. Customized and implemented javascript based on Bootstrap methods.
- Wrote methodology in Javascript for communicating between frontend and backend.
- Used CSS3 to define presentation components dynamically.

Conductive Resistance – Electronics Products and Education

October 2010 - Current

Owner/Developer

- Wrote instructional circuit simulator in HTML5 Canvas as an interactive learning tool.
- Developed web app for narrowing down product selection among multiple vendors' kits with interactive javascript filtering, and informational display.

Custom WordPress Development

November 2011 - Current

Beaverton, OR

- Used HTML5 contextual elements and native media playback.
- Worked in tandem with a Graphic Designer to produce WordPress-based websites to meet customer needs.
- Wrote AJAX communication method for adding and ordering slideshow.
- Developed multiple WordPress themes utilizing WordPress API in PHP.
- Wrote custom WordPress plugins and adapted existing plugins for specialized use in PHP.

Education:

Salt Lake Community College, Taylorsville, UT
Associate of Science, General Studies 2008