

Aaron Eiche

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Summary:

Lead Software Engineer with over 15 years of experience in Web Applications, User Interfaces, Embedded Firmware, Cloud Services and API development.

Tools and Experience:

- Object-Oriented and Functional programming
- Web Development - Front-end, User Interface, and Server-side components and services.
- Embedded hardware development on 8-bit AVR, and 32-bit ARM Microcontrollers.
- MVC and MVVM paradigm
- Standards-based browser coding with focus towards compatibility.
- Git, Subversion version control systems
- Deployment and Configuration Management
- AWS (EC2, RDS, API Gateway, Lambda)
- REST remote services design and development.
- Continuous Integration

Languages and Frameworks:

- Javascript, NodeJS (ES5, ES6/2015)
- C, C++
- Qt, QML
- Java
- React/Redux, Vue/Vuex, Svelte
- HTML5, CSS3, SASS, LESS
- MySQL, SQLite, PostgreSQL, Oracle/PLSQL
- Python, PHP
- Mocha, Chai, QUnit
- 6502 Assembly
- GitLab CI
- Docker, Vagrant

Professional Experience:

Lead Software Engineer

March 2014 - Current

Jaguar Land Rover

Portland, OR

- Led Team in Development of Production Grade Automotive software for Infotainment systems, including Calendar, Third Party Sign-in.
- Led Team in Development of 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, Sports, Download Manager, Third-party Accounts, and Calendar using web technologies (HTML5, JS, CSS3) and Native Qt & QML.
- Designed and Delivered Amazon Echo demonstrator to interact with a vehicle HVAC system, Convertible top, and door-locks. Conceived and built in one week.
- Worked on rapid interface development for internal design review turning around functional designs in under two weeks. Demonstrator designs were delivered to stakeholders at regular intervals.
- Designed and implemented prototype APIs for RVI (Remote Vehicle Interaction) for remote HVAC control, including implementation of Voice-first interfaces.
- Built internal asset management software, utilizing a REST API and web-based interface. Development was used in Bi-weekly instructional meetings for development team describing Test Development Paradigms (TDD, BDD), Software Patterns, and functional programming. Product utilized ExpressJS, PostgreSQL, and VueJS
- Built customer portal backend for Mogol Inc. interacting with AWS to generate API keys, handling payment processing, and enabling customer signup/management.
- Developed and delivered core ReactJS customer portal application to OpConnect, to be further developed by internal engineers.

- Contributed to and interacted with 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 sharing system.
- Worked with incubator and collaborator companies CarFit and EggCyte developing and delivering integration software and firmware for embedded devices written in C and C++.
- Initiated efforts to improve development resources, and team interaction, designing and introducing version control workflows, and methodologies for code review processes.

UI Engineer

October-February 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 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

March-Sept 2013

Contract at CMD, Jive Software
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.
 - 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.v

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

- Developed Website for updating taxpayer information online without interaction with Dept representatives.
 - 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.

Additional Professional Experience Available upon Request

Additional Experience:

Open Source Project - Do Want – Web Gift Registry

October 2010 - 2016

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.

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

- Worked in tandem with a Graphic Designer to produce WordPress-based websites to meet customer needs.
- Developed multiple WordPress themes utilizing WordPress API in PHP.
- Wrote custom WordPress plugins and adapted existing plugins for specialized use in PHP.

Education:

Brigham Young University Idaho, Rexburg, ID

Bachelor of Science, Software Engineering 2020

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