JONATHAN ZEMPEL

6362 Desert Flame Dr., San Jose, CA 95120
408.805.5044
jzempel@gmail.com

Summary

An accomplished semantic web developer, specializing in resource-oriented design and analysis, application of pure RESTful patterns, robust micro-service architectures, lean thinking, dedication to code construction styled for readability, and software implementations tuned for performance. Repeatedly recognized for a broad range of technical competence, an untiring dedication to mentoring and quality review, superb team leadership ability, and a keen awareness for inventing flexible product solutions catered to a wide variety of consumer demands.

Technical Expertise

- *Languages:* Python, Ruby, HTML5, CSS, JavaScript, Java, SQL
- *Frameworks:* Flask, Rails, Django, Apache Tomcat, WebSphere
- *Technologies:* REST services, JSON, jQuery, Ember, Jinja2, xUnit, BEM OOCSS
- *Cloud:* Heroku, EC2, New Relic, SendGrid, Loggly
- *Databases:* MongoDB, Redis, MySQL, SQLite, Oracle, SQL Server
- *Operating Systems:* Mac OS X, Linux Ubuntu, Debian
- *Development Tools:* git, vim, terminal, PivotalTracker, JIRA

Professional Experience

Zendesk, Inc., San Francisco, CA **Apr '14 – Present**

Sr. Software Engineer

Member of the illustrious Creative Team.

- Built internal TV application (Rails 4) used to broadcast worldwide company news and information
- Created Project: Garden (Ember + Rails) - a place for developing cross-application web components

Pickwick & Weller, San Francisco, CA **Aug '12 – Apr '14**

Developer

Worked with a crack startup team in the fashion space where I obsessed over the design and construction of beautiful, pixel-perfect service APIs and elegant, opinionated web and mobile UIs.

- Leveraged jQM to create the entire mobile web experience
- Implemented redesign of the majority of the e-commerce site
- Shifted the development team from manual to a continuous deployment strategy
- Injected a custom CMS implementation used to serve user-generated content throughout the website
- Periodic ownership of social marketing campaigns
- Initiated the development of an internal graphical dashboard used to monitor sales and inventory
- Authored open-sourced Stamps.com and Fedex shipping APIs implemented for order fulfillment

Genomera, Inc., Palo Alto, CA **Feb '10 – Aug '12**

Architect

Responsible for the inception of an internet-scale, social application designed to modernize clinical trials - helping people use information about their DNA to answer health questions. Successfully combined lean startup techniques with agile development practices inside a swift moving, "fail fast" entrepreneurial environment.

- Built the entire website based on a HTML5+CSS+JavaScript, Python, and MongoDB stack
- Deployed to production multiple times per day, starting from day one
- Worked with the product team to implement a full site re-design
- Conducted numerous interviews to better understand application user delight and frustration

Professional Associations

ADL Community – www.adlnet.gov **Jul '05 – Feb '10**

Technical Working Group Member, SCORM 2004 3rd Edition

Partnered with ADL in the development of the SCORM suite of specifications since version 1.0 (including versions 1.1, 1.2, and 2004). Contributed to the specification and technical review of the standard content aggregation model, run-time, sequencing and navigation books.

IMS Global Learning Consortium – www.imsglobal.org **Apr '02 – Jan '03**

Contributing Member, IMS Simple Sequencing, Version 1.0

Joined the Simple Sequencing working group, dedicated to the method definition for representing authored learning experiences, such that an eLearning management system sequences learning activities in a consistent way. In nine months, the group completed the specification of a complex rule-based sequencing information model.

Publication Contributions

AICC: CMI Guidelines for Interoperability **Aug '04**

Provided review and feedback as a qualified implementer of previous AICC interoperability specifications of computer-managed instruction systems for both file-based and web-based environments.

IMS Simple Sequencing Information and Behavior Model **Mar '03**

Contributed to the definition and review of an XML binding for the standard declaration of sequencing controls, rules, conditions, and objective mappings for a learning activity.

Education

Bachelors of Science, Computer Science, Bob Jones University, 1995

Software Patents

US20050112530 – Pending **May '05**

Branched Rollup of Learning Objects with Shared Competencies

Branched rollup was implemented as an enhancement to a more generic activity tree sequencing and rollup framework based on the information and behavior models defined in the IMS Simple Sequencing specification. Before the overall rollup process begins, a RollupContext is created. The RollupContext is responsible for determining the next activity tree node to be evaluated in the rollup process. The rollup

process does not depend on the order of node evaluation, so different implementations of RollupContext can use different algorithms for ordering the nodes for rollup. The enhanced BranchedRollupContext replaces the standard RollupContext within an implementation, and handles the branched rollup using a two-phase approach to identify: 1) a list of rollup branch nodes, and 2) a set of control blocks for each node that defines which branches affect that node. This information is consulted during the rollup process to prevent repeated rollup of any of the nodes within the activity tree.

US20050132330 – Pending **Jun '05**

Pluggable eLearning Tracking Component

The component described by this invention provides support for prevalent eLearning progress tracking standards. While progress tracking components are common to the learning management system (LMS) vendor community, it is not imperative that standards-based tracking be applied specifically to a LMS environment. Unlike existing tracking solutions, the eLearning Tracking Component provides an abstraction, whereby complex run-time progress tracking capabilities can be applied to any software application. This invention exposes the advantage of applying progress tracking to a range of industries beyond eLearning.

US20050136383 – Pending **Jun '05**

Pluggable eLearning Sequencing Engine

The basis for this invention is a module that implements the core logic for all of the static concepts surfaced within the Behavior Model of the IMS Simple Sequencing specification. These include a definition of the sequencing components, the logic for the overall sequencing process (or "sequencing loop"), and the algorithms used to determine the path through the sequencing process (based on navigation, sequencing control modes, limit conditions, sequencing rules, and rollup rules). This invention has the advantage of encapsulating the core business logic for sequencing while leaving application-specific aspects open for reimplementation or extension.