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EXPERIENCE

Senior Software Engineer, Expensify Inc., San Francisco, CA, May 2015-Present

Working on the core C++ backend software that powers Expensify's expense reporting solution, from payment processing to creating accounts to importing receipts.

Software Engineer Apple TV, Apple, Cupertino, CA, Oct 2014-May 2015

Wrote software to run on Apple's streaming media device. Particularly, focused on the layout engine for the app and media stores.

Senior Software Engineer, Akamai Technologies, Santa Clara, CA, Oct 2012-Oct 2014

I returned to Akamai to work on a project that would replace the standard protocols used on the internet for data transmission. The goal was to increase throughput for scenarios like HD video streaming and other bandwidth-intensive uses, especially to mobile platforms.

- Developed hybrid HTML5/Objective-C/Cocoa Touch iOS video streaming and download apps.
- Integrated a native Objective-C frontend with a cross-platform C++ low-level networking library in iOS apps.
- Created a multi-language-compatible network library and supporting resources for integration with customer applications.

Senior Software Engineer, Evernote, Redwood City, CA, Jan 2012-Oct 2012

HTML5 development for browser extensions. Served as the lead on Evernote's Web Clippers for Chrome and Safari.

- Wrote new non-blocking HTML serialization engine for inlining CSS to create Evernote notes from standard HTML. This improved performance by an order of magnitude and improved output quality.
- Ported Chrome Clipper to Safari such that a single codebase could build to extensions for both browsers.
- Added new features using the latest HTML5 technologies including CSS animations, the Filesystem API, postMessage, and others.

Senior Software Engineer, Akamai Technologies, San Mateo, CA, 2007-2012

I worked on the Akamai NetSession Interface — a peer-to-peer service for delivering static files and on-demand and live-streamed video. It runs on millions of end-user desktop machines, on both Windows and OS X platforms. Some of my key contributions included:

- Developed a thread-safe and efficient JSON library in C++ to enable easy interaction between NetSession and JavaScript-based web applications.
- Made scalability improvements to support caches of thousands or tens of thousands of peer-to-peer sharable video files.
- Added support for various HTTP client and server features (i.e., handling 407 status codes when connecting through proxies, honoring cache-control headers sent by upstream servers, etc).

Software Engineer, Red Swoosh, San Francisco, CA, 2006-2007

Red Swoosh was a small startup building peer-to-peer file delivery software. I worked on various webbased parts of their technology. In 2007 the company was acquired by Akamai Technologies. These are some of the interesting things I did at Red Swoosh:

- Designed a HTTP/JSON based API for controlling peer-to-peer software from a web browser.
- Implemented a front end for that API in Flash/Flex to build a Firefox extension for using BitTorrent in the browser.
- Wrote a Perl HTTP server to support Ajax features, such as showing a progress bar for uploads in the end-

user's browser while proxying the uploading file to Amazon's S3 storage service.

Web Developer, United States Geological Survey, Sacramento, CA, Oct 2002-2006

I was put in charge of the USGS's California Water Science Center's website. While working in this capacity I built:

- A multi-user content management system to replace the old static website. It supported contribution of multiple content types by unprivileged users with supervisors approving new submissions.
- A project-management site that handled a custom workflow around creating scientific reports. This included sending drafts to editors, requesting feedback from peer reviewers, timeline-management and statistics reporting, etc.
- A set of document preparation tools for marking up documents with XML such that they could then be rendered to either XHTML or PDF in agency-standard formats.

EDUCATION

California State University, Sacramento — 2002-2006

Studied Computer Science.

PRINCIPAL SKILLS

C, C++, Objective-C, JavaScript, iOS, OS X, HTTP, HTML5, CSS