curious engineer, quirky artist

Professional Objective

To create devices and applications that enable humans to do amazing things.

Experience

Sifteo

Software Engineer December 2011 - July 2013

Designed, developed, and maintained all web services for Sifteo Inc. Including:

- A publishing service to update, distribute, and report the sales of dozens of Sifteo games.
- A portal to provide historical Sifteo SDK versions for hundreds of developers.
- A service to collect and query quality assurance data on hundreds of thousands of Sifteo products created at Sifteo's manufacturing center in China.
- An api service that enabled thousands of users to purchase and download games through Sifteo's desktop software, Sifteo Sync.

Lead measures to improve web development, such as cultivating portable virtualized environments, automating deployments, and providing continuous integration for multiple web services.

Quickly iterated on distributed system design to facilitate the development of Sifteo Sync.

Created modern, rich-media experiences on contstrained machines with QT webkit and HTML5 technologies.

Engaged in extra-cirricular exploration projects, such as developing OSC client implementations that enabled Sifteo Cubes to communicate with Digitial Audio Workstations and other OSC enabled devices.

Kelly Dunn LLC

Freelance Software Engineer October 2011 - Present

Freelance Web Development and Software Engineering primarily within the domain of creating audio-visual utilities and web services that enabled musicians to distribute their music across the web. Some experimental work with control interfaces, specifically with MIDI controllers.

Originate

Software Engineer June 2010 - October 2011

Built and maintained various web-based projects ranging across various technologies and domains, including e-commerce, gaming, and mobile networks. Worked in small, intimate teams with quick turn-over rates.

Responsibilities included estimating with clients, executing on desired features, and delivering a final product.

University of Washington

Teaching Assistant August 2008 - August 2010

Instructed undergraduates in the following areas of Computer Science:

- Syntax / Control Structures
- Data Structures / Runtime Analysis
- Object Oriented Programming
- Web Development
- MVC / Data Abstraction
- Databases

I also held weekly office hours, bi-weekly courses, and graded programming assignments and tests.

Programming Languages

Proficient

Ruby Go JavaScript

C SQL

Knowledgeable

C++ Java Clojure C# Python

Exposure

Lush / CommonLisp Lua / Moonscript Erlang

Protocols

Proficient
HTTP / HTTP2.0
SSL / TLS
MIDI
OSC

Knowledgeable

USB TCP / UDP RTP / RTCP RTSP DLNA

Exposure

SPI SPDY DMX / RDMX

Tools and utilities

ProficientEmacs Git

Linux (Arch / Debian)
Vagrant / Ansible / Chef
PostgreSQL / MySQL

Nginx Jenkins

Knowledgeable

Apache Redis Selenium gdb

Exposure

Monit LLVM

Notable Projects

go-art (https://github.com/kellydunn/go-art) - an implementation of Adaptive Radix Trees (ART) in golang.

 $\pmb{mumble} \ \ (\texttt{https://github.com/kellydunn/mumble}) \ - \ a \ \ \texttt{MIDI multiplexer for monomes}.$

Education

University of Washington

Bachelor of Arts in Japanese Linguistics September 2006 - June 2010

Volunteer Work

Railsbridge

Volunteer Instructor and Organizer October 2010 - November 2011

Instructed and organized weekend workshops that enabled participants to create web applications using the Ruby on Rails framework. Events were held in the spirit of advocating and enabling gender diversity in technology.

Personal

Musician Homebrewer Rock Climber Painter Open Source Contributor