# **Alex Birdsall**

#### FULL STACK WEB DEVELOPER

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I care about solving problems and I hope to build beautiful, logically interesting things, working in a team that cares about learning and mentorship.

#### Jan '17–Present **The Emoji Dictionary**

php 7 I've been doing side consulting for The Emoji Apache Foundation's crowdsourced Emoji Dictionary. The initial build scripts work has focused on human-readable URLs, rewriting queries, building appropriate database indexes, and other SEO and performance fundamentals, as well as extracting shared templates and refactoring old code for better semantics and maintainability.

## Aug '16-Present Legal Information Institute, Cornell Law

ES2015 yarn karma test runner build scripts browser caching

Cornell Law School picked up the Lawfetcher project, rebranding it as RIO (Read It Online) and hiring me on to maintain and expand it. I refactored and completed test coverage of the domain logic; wrote code to parse a broader set of citation types and link to more sources; converted the build chain to transpile modular ES2015 application code and tests; and implemented a browser cache-busting scheme using md5-based filename fingerprinting (modeled after Rails' asset pipeline), enabling both frequent, iterative code deployment and efficient caching.

#### Jan '16–July '16 **Flock**

Rails 4 rspec Middleman Backbone SCSS encryption & auth

As software engineer for an HR and compliance startup, I worked with the entire stack from stylesheets to server ops. I maintained Middleman static sites for the company's landing page and blog as well as its Rails app. I personally implemented secure and user-friendly integrations with TraxPayroll and Greenhouse.io, which involved complicated data mapping, multiple forms of encryption, and, at times, working with out-of-date and contradictory documentation. I organized both the stylesheets and javascript directories, each comprising dozens of files (some, at the time, several thousand lines); and in general, worked hard to advocate for consistency of data modeling, API boundaries, and abstraction on a codebase, initially built by foreign contractors, that left much to be desired in those regards.

#### Aug '15-Dec '15

#### **Lawfetcher**

Javascript npm jasmine build scripts browserify

A freelance project in collaboration with Prof. Peter W. Martin of Cornell Law. A free tool for legal writing, it semantically parses US legal citations and programmatically builds direct links to the full text in various free and subscription services. Techniques borrowed from OOJS, functional- and aspect-oriented programming paradigms; more regular expressions than you can shake a stick at.

#### Jan–Mar '15

### **Magoosh**

MySQL Rails 3 HAML Bootstrap

I worked as a junior dev with Magoosh, a leader in online test prep based in Berkeley. I shipped many CoffeeScript features, including auto-tagging for support tickets, an instructor dashboard, an in-house A/B testing library, and a photo upload system for static pages. I focused intensely on improving the design quality and professionalism of my code.

#### Sept '14 Susteq

Ruby on Rails I was part of a team that, in one week, built and deployed a Rails app for Susteq, a Dutch non-profit. We HAML worked with the client to develop and implement a set of features to monitor data from water points and sales kiosks across Kenya and dynamically generate graphs and tables using NVD3.js.

#### Jul-Sept '14 **Dev Bootcamp**

Ruby An immersive 19-week web development program.

Ruby on Rails Over the final 9 weeks alone, I worked over 1000 hours at the San Francisco campus in an intensely collaborative environment that emphasized hands-on learning, empathy, communication, and problem
\*NIX solving.

HTTP

HTML

CSS

#### Summer '12 & '13 Portland Community College

While employed at Art 4 Life, independently pursued interests in Statistics and Computer Science. Where I discovered how much I enjoy programming.

#### Nov '12-Jun '14 Art 4 Life

As Head Teacher, I ran the daily operations of an afterschool art program for 2nd and 3rd graders at North Portland's Chief Joseph Elementary. Between coming up with daily projects and managing a group of 30 kids, a constant exercise in communication and off-the-cuff creativity.

## Class of '08 Cornell College

B.A. in English, minor in Music. Received 2007 Winnifred Van Etten Award for Creative and Scholarly Excellence.

Though seemingly unrelated, my studies centered on an interest in how human expression exists within and is influenced by logically analyzable systems like syntax, music theory, or grammar. I have found this to be surprisingly good preparation for the work of programming.