**Alec K. Hoey**

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**EDUCATION**

**University of California, Berkeley – College of Engineering**

May 2014

B.S. Electrical Engineering and Computer Science 2014

**EMPLOYMENT**

**BrightRoll/Yahoo! – San Francisco, CA (https://publisher.brightroll.com)**

July 2014 — February 2016

**Software Engineer (Publisher Platform Team)**

* Designed and built scalable, RESTful APIs that power the BrightRoll publisher platform in Ruby on Rails and Scala Play
* Deconstructed APIs into modular components, such as HTTP caching, filtering, paging, and ordering, to allow simple and uniform endpoint development
* Developed gem that builds complete authorization queries from simple relation ownership statements from arbitrarily-deep directed ownership graphs
* Owned and maintained the public API that unifies and serves resources from many backend micro-service APIs with consistent presentation and authorization using asynchronous HTTP programming
* Designed and implemented monitoring tools to track individual requests through multiple micro-services using Twitter Zipkin and Logstash
* Implemented inventory packages and deals to limit access to publisher inventory in the adserving Akka trafficking system
* Launched and managed high-availability database and API clusters in AWS using Puppet

**Google Offers – Mountain View, CA**

May 2013 – August 2013

**Software Engineering Intern (Offers Ads Distribution Team)**

* Applied massive-scale machine learning techniques to estimate conversion rates of Google Offers Ads
* Developed an extensible framework to generate various feature sets from offers data
* Created a MapReduce pipeline to join Google Offers and Google Ads to generate training data for machine learning
* Tuned models using cross-validation and experimented with different feature sets and machine learning techniques
* Built using C++

**Groupon – Palo Alto, CA (http://groupon.com)**

June 2012 – August 2012

**Data Pipeline Engineering Intern (SmartDeals/Relevance Team)**

* Developed large-scale, backend data analytics workflow to measure experiment effectiveness
* Compare control and experimental rankings and output into digestible form for data warehouse
* Ownership of nontrivial problem—accounting for business rules, cache changes, and cluster scheduling
* Built using Hadoop, Java, and Ruby

**Magoosh – Berkeley, CA (http://magoosh.com)**

May 2011 – March 2012

**Ruby on Rails Developer**

* Developed Ruby on Rails app for test preparation startup
* Modeled new question types, each with custom grading logic and grading options
* Worked full-stack: from deployment scripts and server config to front-end jQuery
* Built jQuery calculator from scratch—custom evaluation rules to match GRE calculator

**PROJECTS**

**Where Should We Eat**

May 2012 – January 2014

* A restaurant recommendation engine built on top of the Yelp! API
* Implemented random, list, and location recommendation types using multiple table inheritance
* Persisted restaurants from Yelp! requests and mapped them using d3 choropleth

**CalTeachables**

September 2012 – December 2012

* A lesson plan repository for nonprofit educational organization
* Solr full-text search, multiple permission roles, full-featured admin dashboard, wiki markup, and user ratings

**UC Berkeley Education Platform (edX Precursor) – Berkeley, CA (http://cs188.org)**

February 2012

**Rails Developer**

**Languages**

**Strong**: Ruby, Scala, Python

**Limited**: JavaScript, Java, C/C++