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   February 2012
(http://cs188.org)
  Rails Developer

Languages

Strong: Ruby, Scala, Python   **Limited**: JavaScript, Java, C/C++