

## OBJECTIVE

Seeking Software Engineering position to utilize skills in developing maintainable code and infrastructure

## EXPERIENCE

### Software Engineer, Optimizely Inc., San Francisco, CA, April 2015-Present

- Shared responsibility for design, implementation, and maintenance (both infrastructure and code) of event ingest, storage, and analytics API consumed by Optimizely's A/B and Personalization products
- Assessed Druid performance for production-based data created with Python and the Druid REST API and run with JMeter
- Built stream processing job using Samza, Kafka, and Scala to analyze event ingest traffic behavior and detect DDOSs
- Implemented nightly HBase snapshots to S3 HDFS using Hue, Oozie, and Java

### DevOps Engineer, Optimizely Inc., San Francisco, CA, November 2013-April 2015

- Designed and built backend service deployment tools (HBase, Zookeeper, Druid, and more) using AWS CloudFormation, Chef, and Cloudera Manager, including infrastructure level testing and monitoring suites
- Built and maintained AWS network stack using multi-AZ VPC subnets, NATs, and ~~custom~~ PowerDNS Route53 with dynamic syncing from EC2 instance attributes (Migration blog post [here](#))
- Enhanced custom monitoring tools using Nagios and EC2 boto Python API with YAML-specified global, cluster, and host tiered alerts
- Deployed dynamic parallel SSH solution with Salt and custom host-key cleanup in Python for ad-hoc fixes and deploys (i.e. backend emergency life-line and temporary log-aggregator)
- Developed and maintained AWS SSO Sinatra app using Google OAuth for multiple environments and IAM policies (Backend, Production, Staging, and DevOps)
- Launched Jenkins cluster for engineering wide, multi-team, continuous integration using AWS Auto-Scaling and collocated OSX nodes for iOS development

### Backend Consultant, Gradient Studios, Boston, MA, February 2013-March 2013

- Advised a five member gaming startup on infrastructure procedures for a node.js, physics based, browser game
- Developed failover system for Chef Server using DRBD, OCFS, and custom STONITH scripts to ensure high-availability for Joyent server deployment
- Created and managed automated email support using POSTFIX for server failure

### Linux Systems Administrator, Knome Inc., Cambridge, MA, September 2012-November 2012

- Provided general administration and maintenance over in-house and Amazon EC2 servers to aid in development and testing of genomic interpretation software
- Implemented and tuned multiple high-speed networks and file-systems, including Infiniband and Lustre, for high-performance applications with large data sets
- Developed and tested CentOS auto-deployment using Puppet to set-up cluster environment using Sun Grid Engine over KVM virtualization for product development

### High-Performance Computing System Administrator, University of Connecticut, Storrs, CT, August 2011-July 2012

- Supervise and maintain deployment, configuration management, and user level applications to ensure 24/7 reliability of Red Hat, Intel Xeon X5650 Westmere Cluster
- Provide user support and troubleshooting assistance to advance research throughout multiple university departments and research groups, and foster a central environment for high-performance computing
- Install software and monitor system performance of cluster to strive towards 100% utilization, maximum resource efficiency, and optimum job scheduling

### Software Developer (Honors Thesis Program), University of Connecticut, Storrs, CT, August 2010-May 2012

- Designed a hybrid Pairs Trade/Factor Model to trade highly liquid assets using R Programming Language and Interactive Brokers API

### Undergraduate Researcher, University of Connecticut, Storrs, CT, June 2011-August 2011

- Analyzed HTTP traffic from campus Wi-Fi gateway router to investigate possible trends between non-mobile and mobile devices and discover possible improvements in mobile device protocols and cache storage

## **PRIDE PROJECTS**

Contributor/Maintainer, Refuge Restrooms, [refugerestrooms.org](http://refugerestrooms.org)

- Contributed bug-fixes and improvements to open source Rails app, mapping transgender friendly and ADA accessible public restrooms
- Implemented development environment setup using Vagrant and BASH to enable group of remote developers to contribute quickly

## **EDUCATION**

University of Connecticut, Storrs, CT

Bachelor of Science in Engineering, Computer Science and Engineering, May 2012 Minor in Mathematics

G.P.A. 3.65/4.00, Honors Program, Dean's List

Study Abroad: University College Dublin, Dublin, Ireland, January 2011-May 2011