Kellen Donohue

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1135 25th Avenue Seattle, WA 98122

EDUCATION

University of Washington, Seattle, WA

M.S. Computer Science and Engineering, June 2013

B.S. Computer Engineering, June 2012, Cum Laude

B.A. Political Science, June 2012, Cum Laude (Minor: Applied Mathematics)

Overall GPA: 3.81

Bothell High School, GPA: 4.00 (Rank 1 of 542), Valedictorian

INDUSTRY EXPERIENCE

Palantir Technologies

Forward Deployed Software Engineer: July 15 - Present

- Tech lead of 6-person team developing custom solution for nationwide medical insurance company to maintain latest contact information for millions of members using HDFS, Spark, Elastic Search, Groovy, PSQL, and AngularJS
- Worked with multi-national bank to develop tools to fight money laundering, integrating transaction, account, and client information from 60 data sources into single platform, processing 1 TB daily
- Created new Redux/React web application for identifying client exposure across divisions, interacting with Dropwizard backend.
- Developed web app PySpark pipeline for cyber security vulnerability management, with data from SCCM, SCOM, Qualys, Service Now

Google - Helpouts, Hangouts

Software Engineer: July 13 - July 15

- Completed front-end projects, primarily in Java, JavaScript, HTML5.
- Developed end-to-end system allowing 3rd parties to offer Helpouts to their own members, including 3rd party web authentication.
- Implemented **unified notification** system for user notifications and user discussions across iOS, Anrdoid, SMS, web, and email.
- Worked on projects ensuring legal compliance, including HIPAA and Terms of Service serving and acceptance recording in **Megastore**.
- Integrated results from **distributed systems** throughout Google into product, including IP geolocation and search query autocomplete.
- Developed UI control mechanism for Chromebox for Meetings devices.

Facebook - Platform

Software Development Intern: June 12 - September 12

- Developed send-to-mobile, a system for delivering mobile app install notifications to Facebook users in **PHP, XHP, and JavaScript**.
- Project served millions of impressions and 1000s of conversions daily.
- Implemented detailed logging, performed A/B testing and analysis.
- Created embeddable social plugin to drive users' web traffic to mobile app installs.

Google - Cloud Computing Infrastructure

Software Development Intern: June 11 - September 11

- Coded for Google Compute Engine in Java, C++, and Python.
- Created **persistent disk hot-swapping** ability, allowing users to attach and detach persistent disks from running Google Compute instances.
- Designed API components, implemented request handling on server, and distribution of **RPC's to massively distributed systems**.

Facebook - Advertiser Success

Software Development Intern: June 10 - September 10

- Created framework for surfacing individual advice for ~125k advertisers.
- Developed **Hadoop/Hive** queries to generate custom suggestions.
- Utilized PHP and JavaScript to display the contextual tips through a variety of channels including an online diagnostic tool, weekly emails, during the ad creation process, and Facebook notifications.

Microsoft Research - Interactive Visual Media

Research Intern: June 09 - September 09

- Implemented **WPF** user interface for panoramic stitching program, including structured mode for stitching 100s of photographs.
- Built managed **C++** wrapper for communication between stitch engine backend and user interface.
- Restructured stitching workflow to improve user experience.

Microsoft - Expression Imaging

High School Intern: June 08 - September 08

- Developed unit tests for image processing utility in C#
- Created testing utility to synchronize web tests and unit tests.

RESEARCH INVOLVEMENT

.NET Daikon Compiler Front-End – under Professor Michael Ernst Research Assistant: October 10 – June 2013

- Paper entitled "Writing and Enforcing Contract Specifications" published International Conference on Software Engineering 2013
- Created program to modify C# programs by inserting calls to visit variable and fields at beginning and exit of methods, reflectively inspecting variable contents and recursively visiting fields.

LiCORICE Project – under Professor Mark Zachry

Student Assistant: October 09 - June 10

 Maintained Ruby scripts compiling data on Wikipedia articles and television broadcast transcripts from mySQL database in XML format.

OPEN-SOURCE CONTRIBUTION

Github: https://github.com/melonhead901
Google Code: http://code.kellendonohue.com
Bitbucket: https://bitbucket.org/kellend/

- Team project to create a specimen tracking system for UW Med Center.
- System comprised Ruby on Rails webserver and Android app for couriers
- My responsibility was communication between the Android and web servers and the build and integration test servers.
- Research work as described above.

TECHNICAL SKILLS

Knowledgeable in: C#, Java, HTML5, JS, CSS, PHP

Experience with: Unix, Ruby+Rails, WPF, Python, C++, SQL, Android

Exposure to: C, ML, MATLAB, Hive

<u>Graduate Level Focus:</u> Programming Languages, AI, Distributed Systems, Compilers, Security, Software Engineering

AWARDS / SCHOLARSHIPS

- Dean's List, All Quarters and Years
- Washington Scholar (Full Tuition)
- NASA Space Grant Scholar

