## **TECHNICAL SKILLS**

jon@jonsims.me jonsims.me

Computer Languages	Frameworks	Databases	Other Technologies
Python, SQL/PLSQL, Java,	Rails, Node.js,	PostgreSQL 9.3+,	Enterprise Linux Systems
Ruby, Javascript, C/C++, Bash,	Bootstrap,	Oracle Database	(Debian, Fedora, Ubuntu),
HTML/CSS, Haskell, Prolog,	Express.js,	12c, SQLite,	Git /SVN, Oracle
PHP, Assembly, Lisp, Batch	jQuery	MySQL	Peopletools 8.53, RAID

#### **WORK EXPERIENCE**

# **Tyemill** (Seattle, WA)

Software Developer Intern, June 2015 - August 2015

- ► Worked with Ruby on Rails to develop a web application for financial analysis.
- ► My tasks involved calculations on the performance of portfolios containing 500+ companies over 20+ years, dealing with rebalances when securities were sold, and comparing the returns for different types of portfolio compositions (S&P, diversified, and stratified).

### University of Puget Sound (Tacoma, WA)

Junior Database Analyst, September 2013 - June 2015

- I was a work study student with the university's database team, helping replace queries and views from their legacy database structure using the newer Oracle Peoplesoft.
- Using PL/SQL for views and Oracle Peopletools for queries, I met the database needs for various academic and financial departments around campus.
- ► I worked with the senior developers who build the university's SQL database in the first place. From them, I've learned a foundational understanding of database administration.

#### Risk Technology Solutions (Charlotte, NC)

Junior Linux Systems Administrator, June 2013 - August 2013

- ► Risktech writes customized software for individual firms based on their market analysis needs. Rather than rewriting redundant code for similar problems, they wanted to look into an open source platform on which to write customized software.
- My role was to install and test the Opengamma platform for them in order to achieve an open source solution.
- ► I analyzed the potential costs and benefits of developing atop Opengamma.

# Freelance Web Developer

2012 - Present

- ▶ I set up an apache2 webserver for my home server with my personal website at the address jonsims.me, with a backup at aristeia.github.io.
- ► In the summer of 2014, I designed a website at j-walking.biz for another client's dog-walking business (but has since been deactivated, however, a backup exists here).
- ▶ In the fall of 2012, my uncle needed a website to show off his restaurant to the world. I wrote the website's code and set up its hosting, viewable at tomsgrill.net.

#### **EDUCATION**

### **University of Puget Sound** (Tacoma, WA)

B.S. in Computer Science and Mathematics (double major), May 2016

- ► Courses include compilers, NLP, AI, networks, abstract and linear algebra, modeling, optimization, numerical analysis, probability and stats.
- ► I've also tutored students for my university's computer science department for several hours per week, typically helping students of introductory and intermediate computer science classes, for the past two years.

#### **INTERESTS**

# **Association for Computing Machinery** (University of Puget Sound)

President and Project Organizer, August 2013 - Present

- ► I've participated in this club through several projects since the beginning of freshman year, and have served as its project organizer and president for the past year.
- We've hosted several hackathons, including the ACM's intercollegiate programming competition.
- ► We've worked on a Rover project this past year, automating the driving of an RC car using Arduino ultrasonic sensors.
- ► From last summer, we built a native IOS/Android/web app Eventi (view the web app here), a method of viewing campus event posters from a mobile device as well as posting event information for our campus community. I focused on the Ruby-on-Rails backend, dealing with its API and database.
- ► We've also constructed a pseudo-supercomputer, which can successfully run threaded programs in parallel, out of several raspberry pi computers.

# **KUPS 90.1FM** (University of Puget Sound)

Communications Engineer and Webmaster, August 2015 - Present

- ▶ Worked on several software projects for the station, most notably a new radio automation system/scheduling software as an open-source project. The software uses information from music files to datamine exact music metadata from online sources, and also finds currently-trending music to add to the rotation. After validating music files with this metadata, the software queries these same sources for several metrics of popularity (enabling the software to rank the frequency with which the music should be played) as well as for genres, subgenres, and similar artists. Using these various classification features, playlists of similar music are generated using a k-nearest-neighbors approach.
- ► Additionally, performed basic systems administration tasks on the various computer systems used within the station, as well as regular maintenance of the website kups.net.

# **Additional Collegiate Involvement** (University of Puget Sound)

- Certified trip leader for Puget Sound Outdoors, as well as CPR and wilderness first-aid certified.
- ► Participant in the Putnam mathematics competition.
- ► Interfraternity Council's Director of Public Relations, elected in the fall of 2014 to serve for a full year.