

TECHNICAL SKILLS

Computer Languages	Web Frameworks	Databases	Other Technologies
Python, SQL/PLSQL, Java, Ruby, Javascript, C/C++, Bash, HTML/CSS, Haskell, Prolog, PHP, Assembly, Lisp, Batch	Rails, Node.js, Bootstrap, Express.js, jQuery	PostgreSQL 9.3+, MongoDB 3.0, Oracle Database 12c, SQLite, MySQL	Enterprise Linux Systems (Debian, Fedora, Ubuntu), Git /SVN, Oracle Peopletools 8.53

WORK EXPERIENCE

T-Mobile (Bellevue, WA)

Mobile Automation Testing Engineer, January 2017 - Present

- ▶ Using UI Automator and ADB frameworks, I scripted the setup and configuration of general Android devices such that they can be integrated into a device farm seamlessly.
- ▶ Wrote and graphically-designed a website explaining our group's product at cxlabs.io using Hugo.

Machine Learning Engineer, June 2016 - December 2016

- ▶ Perform predictive analytics on customer data attributes using Python and its scikit-learn library.
- ▶ Implemented a data cleansing and validation mechanism to make unstructured JSON data into feature vectors in a way that scales for 168,000 unique feature-value pairs to be persisted to disk for 118 million customers, capable of translating at a rate of several million vectors per day.
- ▶ Tuned and automated training on predictive models using these feature vectors, capable of making 1.25mil predictions per day.
- ▶ Implemented a prediction verification mechanism to determine the accuracy of the predictions over time, which found a prediction .

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.

Risk Technology Solutions (Charlotte, NC)

Junior Linux Systems Administrator, June 2013 - August 2013

- ▶ Risktech writes customized trading software atop different open-source solutions. My role was to install and test the [Opengamma platform](#) for them, analyzing the potential costs and benefits of developing atop it.

Freelance Web Developer

December 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.
- ▶ I've set up several other websites for other clients, including one in 2014 at j-walking.biz for a client's dog-walking business, and one in 2012 for my uncle's former restaurant at tomsgrill.net.

EDUCATION

University of Puget Sound (Tacoma, WA)

B.S. in Computer Science and Mathematics (double major), August 2013 - May 2016

- ▶ Courses include [compilers](#), [NLP](#), [AI](#), [networks](#), [abstract](#) and [linear algebra](#), [modeling](#), [optimization](#), [numerical analysis](#), [probability](#) and [stats](#).
- ▶ For the last two years, I tutored students and graded programs for my university's computer science department for several hours per week, typically helping students of introductory and intermediate computer science classes.

INTERESTS

Association for Computing Machinery (University of Puget Sound)

President and Project Organizer, August 2013 - May 2016

- ▶ I've participated in this club through work on several projects, 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](#) several times.
- ▶ We've worked on a Rover project since August of 2015, automating the driving of an RC car using Arduino ultrasonic sensors.
- ▶ From the summer of 2015, 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 - May 2016

- ▶ 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.