

TECHNICAL SKILLS

Computer Languages	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+, Oracle Database 12c, SQLite, MySQL	Oracle Peopletools 8.53, Enterprise Linux Systems (Debian, Fedora, Ubuntu), Git /SVN

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

- ▶ I installed several programs onto their servers for the purpose of analyzing stock positions and portfolios.
- ▶ Risktech writes customized software for individual firms based on their market analysis needs. Rather than rewriting redundant code for similar problems, they want 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.

University of Puget Sound (Tacoma, WA)

Tutor for the Computer Science dept., September 2014 - Present

- ▶ I also tutor for my university's computer science department for several hours per week, typically helping students of introductory and intermediate computer science classes.

Freelance Web Developer (Clarendon Hills, IL)

December 2012 - Present

- ▶ In 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. It exists at tomsgrill.net.
- ▶ In the summer of 2014, I designed a website at j-walking.biz for another client (but has since been deactivated).
- ▶ I set up an apache2 webserver for my home server at the address jonsims.me, with a backup at aristeia.github.io.

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](#).

INTERESTS

Association for Computing Machinery (University of Puget Sound)

President and Project Organizer, August 2013 - Present

- ▶ I've participated in this club through a couple of projects since the beginning of freshman year, and have served as its project organizer and president for the past year.
- ▶ We have hosted several hackathons, including the ACM 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 at eventi.pugetsound.edu](http://eventi.pugetsound.edu)), a method of viewing campus event posters from a mobile device as well as posting event information for our campus community.
- ▶ 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 datamines music information from several online sources using available information from music files (using either metadata or filenames), and can also find new, currently-trending music to add to the rotation. After parsing and processing 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 associated with the music. Finally, using these various classification features, the software generates playlists of similar music using a k-nearest-neighbors approach (randomly selecting the next track from the k neighbors, weighted by closeness).
- ▶ 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 first-aid and CPR 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.
- ▶ DJ for KUPS for the past two years.
- ▶ Founding father of a chapter of the Beta Theta Pi fraternity.