# PAUL WANG
YEAR 3, COMPUTER SCIENCE MAJOR
*https://pwang347.github.io*
*https://github.com/pwang347*

**UBC Awards**
Chancellor's Scholar, 2015W Science Scholar and Dean's Honour List placements, 2015W Trek Excellence Scholarship

**Cumulative GPA**: 94.0%

## TECHNICAL SKILLS

- **Languages:** Java, Golang, Ruby, C#, C++, JavaScript, Python, Groovy, Coffeescript, SQL, Bash
- **Frameworks:** Rails, Jekyll, Node.js, React.js, Cobra and Viper, Unity, Android SDK, Hubot
- **CI and Other:** Docker, Jenkins, Chef, Capistrano, Git, OpenSuSe Linux, Vim, Heroku

## PERSONAL PROJECTS

**Docker GUI—*Golang, React.js*** *(https://github.com/pwang347/docker-gui)*          July. 2017
- Graphical webserver interface for managing local Docker orchestration and development
- Backend written in Golang, and frontend is designed with React.js and Material UI

**Zen Bot—*Hubot Coffeescript*** *(https://github.com/pwang347/zen-bot)*          Mar. 2017
- Hubot instance using a Facebook Messenger adapter and message chunking; hosted on Heroku
- Integrated open-source APIs to implement embedded YouTube videos, local weather forecasting, dictionary definitions and evaluation of mathematical expressions

**ProBot—*C++*** *(https://github.com/pwang347/probot-ai)*          Aug. 2016
- Competitive AI for StarCraft: Broodwar using Visual Studio C++ that implements minimax with alpha-beta pruning for build order optimization
- Reduced code coupling using interfaces and designed recursive functions for tree traversal

**Chatter—*Node.js*** *(https://github.com/pwang347/chatter)*          Jun. 2016
- Simple real-time, data-persisting chatroom service using Socket.IO and MongoDB that implements text-to-speech functionality

**Portfolio Site—GitHub Pages *Jekyll*** *(https://pwang347.github.io)*          Mar. 2016
- Mobile-scalable and responsive visual portfolio site that renders posts using AJAX calls

**Clipboard++—*Java FX*** *(https://github.com/pwang347/clipboard-pp)*          Aug. 2015
- Clipboard utility tool that allows storage, editing and cycling of multiple clipboard objects; implemented editors to support and provide data-modifying macros for text, image, hyperlinks and file list data flavors for transferable objects detected by the clipboard listener
- Designed views in FXML and created all art assets using Photoshop

**My BGM—*Android Java*** *(http://bit.do/mybgm)*          Sep. 2014
- Published an ad-free music player app to the Google Play Store
- Implemented features such as file type filtering, filename sorting, image caching and preference storage using default Java and Android libraries; designed assets using Photoshop

## TECHNICAL EXTRACURRICULAR ACTIVITIES

**NwHacks 2017—*Node.js*** *(https://devpost.com/software/ubc-course-ranker-lx5owg)*     Feb. 2017
- Wrote Casper.js web-scraper script for RateMyProf and UBC course website to retrieve professor scores; automated csv to MySQL database injection using bash and Java scripts
- Wrote queries for backend API endpoints using Express.js

**Global Game Jam 2017—*Unity C#*** (*https://ubc-ggj2017.github.io*)     Jan. 2017
- Designed world-shifting 2D side-scrolling puzzle game with item collection and inverted gravity

**Local Hack Day 2016—*Python*** *(https://github.com/LocalHackDayUBC/local_hack)*     Dec. 2016
- Wrote Python web-scraper script using BeautifulSoup; performed lexical analysis to determine logical grouping and quantifiers used for course requirements

**LumoHacks 2016—*Node.js*** *(https://github.com/LumoHacks2016/lumohacks-app)*     Sept. 2016
- Designed and implemented core a one-on-one pair-up chatroom system for cancer patients that prioritizes conversation partners based on a set of profile flags

**Global Game Jam 2016—*Unity C#*** *(http://routinecollection.github.io)*     Jan. 2016
- Developed memory-testing item collection GearVR game in Unity
- Implemented core mechanics such as procedural generation of levels, level clearing, as well as visual effects such as a color tween engine, item animations and particle systems

## WORK EXPERIENCE

**Intern, Jam Extensions and Platform— *SAP Labs Canada***     Jan 2017– Present
- Developed new CLI tool for concurrent deployment operations using Golang using Cobra and Viper frameworks—this replaced legacy bash deployment scripts with testable codebase
- Containerized document converter micro-service for Docker; created Jenkins pipeline for image building and architected Capistrano deployment mechanism and internal Syslog logging
- Set up new Jenkins cluster in staging DC, and created web-hook controlled jobs to fully automate staging deployments and packaging GitHub release assets
- Automated provisioning and deployment validation in Jenkins, as well as established pull-request linting and chef-runner job to allow full testing coverage for chef cookbook repository
- Maintained and validated server configurations through Chef recipes and various special deployment instructions; implemented several diagnostics and maintenance tasks in Capistrano
- Reduced complete deployment time from thirty to ten minutes by uploading compiled assets; further reduced subsequent times by implementing logic to skip same revision releases
- Implemented cron-managed chat alerts using GitHub API calls for in-house Hubot instance

**Computer Science Teaching Assistant—*University of British Columbia***     May 2016 – July 2016
- Administered a weekly three hour lab with 21 students for the *Computation, Programs, and Programming* course; explained concepts such as binary search trees and generative recursion
- Held office hours and evaluated problem sets and exams, providing detailed feedback
- Met on weekly basis with instructor and course coordinator to discuss observations and plans