



PAUL WANG

YEAR 2, COMPUTER SCIENCE MAJOR
github.com/pwang347

TECHNICAL SKILLS

Languages: Java, JavaScript, C++, C#, HTML, CSS, SASS, SQL
Mobile: Unity, Android SDK, LibGDX, Phone Gap
Web: Node JS, Rails, Jekyll, WordPress
Other: Git, Vagrant, Doxygen, Windows, Ubuntu

PERSONAL PROJECTS

ProBot—C++ (<https://github.com/pwang347/probot-ai>) Aug. 2016

- Designed a competitive AI for real-time strategy game StarCraft: Broodwar with C++ in Visual Studio using the BWAPI framework; performed unit tests using CppUnit
- Implemented minimax algorithm with alpha-beta pruning for build order optimization, reduced coupling using interfaces, designed recursive functions for tree traversal

Chatter—Node JS (<https://github.com/pwang347/chatter>) Jun. 2016

- Designed a simple chatroom service using Socket.IO and MongoDB
- Implemented text-to-speech functionality by forking package Say.js, contributed bug fix for stopping speech script on Windows systems

Portfolio Site—Jekyll (<https://pwang347.github.io/>) Mar. 2016

- Designed a mobile-scalable site that briefly showcases latest projects; served using the Jekyll framework and hosted on GitHub Pages

Instagram Test—Ruby on Rails (<http://instajams.herokuapp.com/>) Jan. 2016

- Created a mobile-scalable site that displays posts with attached images and has user accounts; developed on the Ruby on the Rails platform using RubyMine
- Hosted app on Heroku app servers and handled image file storage using Dropbox API

Clipboard++—Java FX (<https://github.com/pwang347/clipboard-pp>) Aug. 2015

- Designed a multi-threaded clipboard utility tool created in IntelliJ IDEA to store, edit and cycle through multiple clipboard objects; all art assets made in Photoshop
- Implemented editors to support different data flavors detected by clipboard listener and aimed for a thread-safe design when handling clipboard data; used a modified Singleton design pattern

My BGM—Android Java (<http://bit.do/mybgm>) Sep. 2014

- Designed and published an ad-free music player Android app using Android Studio; enables customization of playlist folder themes and wallpaper
- Implemented features such as file type filtering, filename sorting, image caching and preference storage using default libraries; art assets and promotional art from Photoshop

Menu Builder—Visual Basic

Oct. 2013

- Implemented a desktop database tool using Visual Basic to assist local food delivery services in keeping track of orders and upcoming transactions
- Connected local MySQL database to GUI application to store menu, contact and order information and queried database information to tables

TECHNICAL EXTRACURRICULAR ACTIVITIES**Global Game Jam 2016—Unity C#**

Jan. 2016

(<http://globalgamejam.org/2016/games/routine-collection>)

- Developed a GearVR game in Unity in which the player must collect increasing amounts of items in the same order; used Git for version control in a team of six with the repository available at *(<https://github.com/Five-And-A-Half-Asians/ggj16>)*
- Implemented core mechanics such as simple procedural generation of levels, level clearing, as well as visual effects such as a color tween engine, item animations and particle systems

WORK EXPERIENCE**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
- Maintained office hours and evaluated problem sets and exams, providing detailed feedback
- Met on weekly basis with instructor and course coordinator to report observations

VOLUNTEER EXPERIENCE**Director of IT—CACTES Association** (*<http://www.cactesassociation.org>*) Nov. 2013 – Sep. 2015

- Raised \$5000 to build a water system in rural Nepal by participating in fundraising events and creating posters and promotional material using Photoshop
- Created and managed organization website using the WordPress framework and customized plugins and content using PHP, HTML and CSS
- Scheduled meetings with committee members, delegated tasks and provided progress reports

EDUCATION**Bachelor of Science, Computer Science Major—University of British Columbia** Sep. 2015 – Present

- Received *Chancellor's Scholar Award*
- Received both *Science Scholar* and *Dean's Honour List* placements for winter term of first year
- Expected graduation May 2020

INTERESTS

- Machine learning, Backend development, Game development, Web development
- Digital painting, Music composition, Physics (placed 4th in UBC Olympiad 2015)