



# Daniel Chen

## Technical Skills

Languages	Web Development	Frameworks	Software
Java	JavaScript	JUnit	MySQL
C / C++	HTML	Django	JDBC
SQL	CSS		Git
Python			IntelliJ

## Education

*Bachelor of Computer Science: Year 3*  
University of British Columbia  
CPSC GPA: 3.96/4.0

*Sep 2015 – expected graduation May 2018*

*BSc majoring in Microbiology and Immunology*  
University of British Columbia

*Sep 2010 – May 2015*

## Technical Volunteer Experience

*UBC Visual Cognition Lab: Software Developer*

*Jan 2015 – current*

- Contribute to a Java application designed to test human visual perception of correlation
- Implement, design JUnit tests, and demo experimental conditions requested by researchers
- Test, deploy, and release new versions containing additional experimental conditions, features, and bug fixes following each sprint
- Assist new members in setting up the work environment and introduce them to our Git work flow and dynamic of the team

## Personal Projects

*Top-Down Shooter Game: Java GUI Application*

*Feb 2016*

- Developed a top-down shooter game in Java with randomized player weapon upgrades and auto-generating levels with a wave spawning system increasing enemy difficulty
- Created a simple game loop with fixed time step, utilized double buffering to display images onto a screen, and implemented player, enemy, and projectile collision detection

## Academic Projects

*Airline Reservation System: Java GUI Application*

*Jan 2016 – Mar 2016*

- Collaborated over a Git repository to develop an airline reservation system utilizing MySQL database, JDBC API, and Java Swing toolkit
- Designed and created a MySQL database by defining integrity constraints, modeling entity-relationship diagrams, and utilizing database normalization
- Implemented user account creation, user login, and update queries for users
- Wrote an SQL script to create the database schema and populate the database

### *LiquorQuicker: Web Application*

*Sep 2015 – Nov 2015*

- Leveraged Django to create an interactive web application for storing, reviewing, and plotting liquor stores on a map of British Columbia utilizing the Agile development process
- Created a custom map displaying markers and info windows for pinpointing liquor store locations using the Google Maps API
- Implemented and tested the ability to rate and review liquor stores, and filter them by city
- Registered RESTful endpoints serving JSON or XML containing liquor store information

### *Restaurant Quiz: Android Application*

*Sep 2014 – Nov 2014*

- Developed an Android application where users guess the location of restaurants, filtered by cuisine or Canadian city, in a time-limited quiz
- Programmed back-end functionality in Java to implement a JSON parser to extract restaurant information from Yelp and direction from Google Maps
- Tested and debugged the application using an Android Virtual Device to ensure the program experienced no issues with functionality during presentation

## **Extracurricular Projects**

### *StudyBuddy: Web Application, nwHacks Hackathon*

*Feb 2016*

- Developed a Django web application, within 24 hours, designed to help students organize study groups around Vancouver while collaborating over a Git repository
- Created a database model for users, study groups, and comments
- Implemented back-end functionality for user account creation, login, and posting comments

## **Technical Work Experience**

### *UBC Undergraduate Teaching Assistant*

#### *CPSC313: Computer Hardware and Operating Systems*

*May 2016 – current*

- Assist students in understanding the Y86 ISA, pipelining, caching, virtual memory management, dynamically linked libraries, exception processing, and program execution time
- Teach tutorials, assess students, and provide constructive feedback

### *UBC Visual Cognition Lab: Technical Manager*

*Jun 2015 – current*

- Provide technical support as a first point of contact, ensuring all issues are resolved in a timely and professional manner
- Monitor and maintain performance of computer systems, networks, and data storage to ensure maximum uptime
- Proposed, purchased, and configured hardware upgrades valuing over \$8,000
- Presented workshops on how to proficiently use Git and GitHub to contribute code, track issues, and document projects

## **Interests**

- Participating in coding challenges and hackathons: nwHacks, Google Code Jam, Google Games, Global Game Jam
- Fitness and health: weight training, running, volleyball, badminton
- Playing Dota2 and CS:GO with friends