



## Shukan (Maxwell) Yang

### Year 4, Honours Computer Science, Software Engineering

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### TECHNICAL SKILLS

<b>Programming:</b>	Java, C/C++, C#, JavaScript, TypeScript, Racket/Scheme, Assembly
<b>Web:</b>	HTML, CSS, XML, PHP, jQuery, Restify, React
<b>Database and testing:</b>	SQL, MySQL, JUnit, Yarn, Chai, Mocha
<b>Tools/Environments:</b>	Git, Eclipse, IntelliJ, Atom, Node.js, VS Code, Postman

### TECHNICAL PROJECTS

#### ACADEMIC

**Application Manager** (3-Person, Academic) Jan 2020 - Apr 2020

- Constructed a website for mobile application analysis with database support, which provides functions such as rating, sorting, and viewing application in user-defined order
- Realized client-side behaviours with HTML, CSS, JavaScript, server-side with PHP and SQL for query handling

**Fundamental Java Compiler** (3-Person, Academic) Jan 2020 - Apr 2020

- Created a Racket/Scheme-based compiler that parses Java codes and translates it into executable x86 assembly code by passing through more than 20 levels of compiling
- Explored multiple features from Java, from code structures such as loops and recursive function calls to Object-Oriented Programming, Garbage Collection etc.

**UBC Campus Explorer** (2-Person, Academic) Sept 2019 - Dec 2020

- A full-stack project which enables effective querying of public UBC course/room metadata, with a back-end programmed in TypeScript
- Implemented server-side asynchronous behaviors with Node.js, and client-side with RESTful API
- Developed a back-end with PHP, with data persistence using JSON and simple tag search using SQL and MySQL

#### PERSONAL

**Online Quiz Hosting System** (1-person, Personal) Jan 2020 - Apr 2020

- An online platform which allow users to create multimedia quizzes, host sessions with other participants, and record participant ranking in leaderboards (similar to Kahoot!)
- Programmed the front-end in HTML, CSS and JavaScript that utilizes custom made SVG images

Programmed the front-end in HTML, CSS and JavaScript that utilizes

**Android 2D Platformer Game** (1-person, Personal) Apr 2018

- A single player 2D platformer game on Android, implemented in Android Studio using Java and Android Developer API
- Created custom art and music in Photoshop and Muscores



## WORK EXPERIENCES

### Computer Science Teaching Assistant at UBC

Sept 2019 - Apr 2020

- Communicate with students in labs and tutorials to assist them in course materials
- Actively answer questions asked by students on online forum (piazza)
- Courses: CPSC 210 is a software-engineering course which emphasizes on Objected-oriented programming in Java, and CPSC 121 is a preparation course to algorithm and data structures

## COMPETITIONS

### IEEEExtreme Programming Competition 13.0 (3-Person)

Oct 2019

- Team (with 2 other team members) ranked 1st among all 55 teams in Canada, and top 5% globally
- Solved problems mainly about algorithm design and data structures in 24 hours

## EDUCATION

### Bachelor of Science

Sep 2018 – Dec 2022 (Expected)

### The University of British Columbia (UBC)

Vancouver, BC

- **Major:** Honours Computer Science, Software Engineering Option
- **Current Year Standing:** 4
- **GPA:** A
- **Awards:** UBC Dean's list, UBC Science Scholar, UBC Trek's Excellence scholarship (top 5%)
- **Courses (grade, average):** Intermediate Algorithm Design and Analysis (98, 86), Computer Hardware and Operating Systems (92, 81), Software Construction (98, 74), Models of Computation (99, 75)

## INTERESTS

### Music

- Piano: Equivalent to Royal Conservatory of Music Level 10
- Experienced software: Musecore, Vocaloid

### Art

- pixel art and animation creation
- Experienced software: Photoshop, Procreate