# **Donghyun Daniel Ko**

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#### SKILLS

Languages: C++, C, Java, JavaScript, TypeScript, HTML, CSS, SCSS, C#, Dart, UML

Technologies: Git, MongoDB, Node.js, MySQL, Bash, Unity, Blender, Selenium, Vim, Android

Frameworks: Angular, Express.js, Flutter

#### RELEVANT EXPERIENCE

## **Quality Assurance Test Engineer**

Vancouver, B.C.

Ensightful

Sept. 2020 - Dec. 2020

- Designed Scrum-based test plans for web applications derived from requirements documents and Figma designs
- Performed cross-compatible front-end testing on 4 web browsers and examined RESTful interfaces utilizing Postman
- Wrote automation scripts using Java, Selenium WebDriver, and the TestNG framework for post-release testing
- Leveraged Apache POI to formulate test suites and test cases with Data Driven Testing
- Discovered upwards of 150+ bugs, documented test results, triaged bugs, and conceived detailed bug reports

## **PROJECTS**

Kanban Board Nov. 2020 - Dec. 2020

- A TypeScript web application, fabricated with MongoDB, Angular, Express.js, and Node.js
- Implemented an HTTP RESTful API and JSON Web Tokens for user authentication
- Developed create, read, update, and delete operations as features for the tasks and columns of the Kanban Board

Sonic Recreation Mar. 2020 - Jun. 2020

- A recreation of the 1991 Sonic the Hedgehog as a 2D Java game with an additional Android app for an in-game shop
- Utilized Tomcat Apache to generate the Java Servlet for an HTTP web server environment
- Used MySQL to manage user data for in-game payments and the multiplayer system supportable up to 4 players
- Modeled UML Sequence Diagrams and Use Cases for the server side and Class Diagrams for the client side

**Quba** Sept. 2019 - Dec. 2019

- An autonomous, Checkers-playing robotic arm able to play a match against a human player
- Researched and incorporated game theory logic such as the Minimax Algorithm to instruct and optimize the AI
- 3D printed the robotic components and employed an Arduino Due to control the hardware in C++

# OTHER EXPERIENCE

# **Student Body President**

Vancouver, B.C.

Handsworth Secondary School

Jun. 2018 - Jun. 2019

- Elected as President to lead and represent 1500+ students and be directly in charge of 50+ Student Council members
- Conducted at least 2 meetings per week and presented public speeches for assemblies, events, and interviews
- Spearheaded 30+ events/fundraisers for the Lions Gate Hospital, Harvest Project, and North Shore Youth Safe House

## ACHIEVEMENTS

• Huawei Ascend Innovation Award: Best use of Huawei Atlas 200 DK at MakeUofT 2020

Feb. 2020

• Seanna & Nicole Strongman Award: Top all-rounded graduate of Handsworth Secondary School

Jun. 2019

## **EDUCATION**

## **University of Waterloo**

Waterloo, ON

Bachelor of Software Engineering

**Expected Graduation 2025**