

# Donghyun Daniel Ko

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## SKILLS

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

**Technologies:** Git, MongoDB, NodeJS, MySQL, Bash, Unity, Blender, Selenium, Vim, Android

**Frameworks:** AngularJS, ExpressJS, Flutter

## EXPERIENCE

### Quality Assurance Test Engineer

Vancouver, B.C.

Enightful

Sept. 2020 - Dec. 2020

- Designed high-level test plans for complex web applications
- Performed **Regression**, **Exploratory**, **Black Box**, and **Validation** Testing on front-end products and examined **RESTful** interfaces, utilizing **Postman**
- Automated scripts using **Selenium WebDriver**, **Java**, and the **TestNG** framework
- Formulated test suites and test cases with **Data Driven Testing**, leveraging **Apache POI**
- Documented test results, triaged bugs, and conceived detailed bug reports
- Undertook Agile **Scrum** Development on **Jira** and **Asana**

### 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

## PROJECTS

### Kanban Board

Nov. 2020 - Dec. 2020

- A Kanban Board web application, fabricated with **MongoDB**, **AngularJS**, **ExpressJS**, and **NodeJS**
- Implemented an **HTTP RESTful** structure 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

- Recreated the 1991 Sonic the Hedgehog as a 2D **Java** game with additional **server** and **Android** applications
- Utilized **Tomcat Apache** to generate the **Java Servlet** for an **HTTP** web server environment
- Applied **MySQL** to manage player data for in-game payments and the **multiplayer** element
- 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
- Incorporated **game theory logic** and **algorithms** to instruct and optimize the AI with **C++**
- **3D printed** the robotic components and employed an **Arduino Due** to control the hardware

## 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