




# RYUN KIM

2B Mechatronics Engineering

 (647) 997-8512  
 ryun.kim@uwaterloo.ca  
 ryunkim00.github.io  
 in/ryun-kim

**Languages:** Java, JavaScript, TypeScript, C++, C, Swift

**Tools:** React, React-Native, Node.js, Express, MongoDB, Bootstrap, Git, VS Code, Jira

## WORK EXPERIENCE

**Full Stack Developer** | SS&C Technologies

May – Aug 2020

- Developed automated test scripts in Java using the BDD framework Cucumber and Gherkin for various client facing pages on a brokerage management software called Sub-accounting UI (SUI)
- Researched and integrated SonarQube analysis into a build pipeline to detect and resolve vulnerabilities and hundreds of critical, major, and minor Java code smells in the SUI code base hosted on GitLab
- Worked within a scrum team to define, develop, and estimate user stories and epics in two-week sprint cycles

**Software Engineer in Test** | Maplesoft

Sep – Dec 2019

- Developed 50+ unit and end-to-end automated tests using the JS testing framework Jest and Puppeteer to debug custom web components built in Stencil
- Discovered and prevented numerous bugs from entering production as a result of these tests which underwent review cycles and were submitted on Perforce (VCS)

**UI Designer & Controls Programming Assistant** | HTS Engineering

Jan – Apr 2019

- Produced project-specific UI for HVAC operators from engineered shop drawings, programming datasets, and AutoCAD floor plans, which were converted into 3-D models using SketchUp
- Programmed direct digital control systems based on custom sequences of operation using plugin-in stencils on Visio and performed field testing

## PROJECTS

**Anti-Bumper Car** | Hack the 6ix – Placed 2<sup>nd</sup> Overall

Aug 2020

- Developed an iOS application on Xcode using Swift and Apple's ARKit and uploaded it onto an iPad Pro 11 to detect rear and side 2-D images of a secondary vehicle and send an appropriate driving mode (drive, break, turn right/left) to an HTTP endpoint hosted on Autocode based on real-time data of a primary vehicle's relative position and velocity
- Placed 2<sup>nd</sup> out of 92 project submissions; completed on a four-person team in less than 36 hours

**YelpCamp** | Udemy

Oct – Dec 2019

- Developed a dynamic, RESTful web application for users to review campsites with custom user authentication/authorization and comment features using Bootstrap, Node.js, Express, MongoDB Atlas, Git, a cloud-based IDE called Goorm, and Heroku for deployment

**Meeting Minutes** | Hack the North

Sep 2019

- Developed a meeting minutes taker that listens to and summarizes a meeting using a Google Home Mini, VoiceFlow API for speech-to-text, Python for summarizing, Firebase API for backend, and React for UI on a four-person team

**Personal Website** | Individual

Apr 2019

- Developed a personal website using Bootstrap and jQuery hosted on GitHub: ryunkim00.github.io

## EDUCATION

**Candidate for Bachelor of Applied Science**

Mechatronics Engineering, University of Waterloo, 2023

- **Relevant Courses:** Data Structures and Algorithms
- **Honours:** Term Dean's Honours List (1A, 1B)

## INTERESTS

- A cappella singer in "The Water Boys" and "The Unaccompanied Minors" (5 terms total)
- Piano and acoustic guitar player (10 years)
- Musical theatre major in high school (4 years)