



RYUN KIM

Mechatronics Engineering | University of Waterloo

 (647) 997-8512
 ryun.kim@uwaterloo.ca
 [ryunkim00.github.io](https://github.com/ryunkim00)
 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 Java code smells in the SUI code base hosted on GitLab
- Collaborated 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 comprehensive unit and visual integration tests using Puppeteer and the JS testing framework Jest to debug custom web components built in Stencil used in the company's modelling and simulation software *MapleSim*
- Prevented bugs from entering production by running the test suite using custom npm run scripts, undergoing review cycles for the test files and submitting them on Perforce (VCS)

UI Designer & Controls Programming Assistant | HTS Engineering

Jan – Apr 2019

- Produced graphical components used in project-specific UI for HVAC operators from engineered shop drawings of duct systems and AutoCAD floor plans; converted these floor plans into 3-D models using SketchUp
- Programmed direct digital control systems for actuating HVAC systems based on custom sequences of operation using a plugin-in analog and digital logic stencil on Visio

PROJECTS

Anti-Bumper Car | Hack the 6ix – Placed 2nd Overall

Aug 2020

- Developed an iOS application to detect environment and actors around a self-driving vehicle and send the appropriate driving command to avoid collision
- Tools used: XCode, Swift, Apple's ARKit, built-in LiDAR sensor of an iPad Pro 11, Autocode (HTTP endpoint), Arduino

YelpCamp | Udemy

Oct – Dec 2019

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

Meeting Minutes | Hack the North

Sep 2019

- Developed a real-time 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

Personal Website | Individual

Apr 2019

- Developed a personal website using Bootstrap and jQuery hosted on GitHub: [ryunkim00.github.io](https://github.com/ryunkim00)

EDUCATION

Candidate for Bachelor of Applied Science

Mechatronics Engineering, University of Waterloo, 2023

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

INTERESTS

- A cappella singer and leader in "The Water Boys" and "The Unaccompanied Minors" (5 terms total)
- Piano and acoustic guitar player (10 years)
- Musical theatre performer (4 years)
- Cycling, reading, learning, networking, travelling