

# Robert Craig

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## ACADEMICS

**Software Engineering,**  
University of Waterloo  
**4.0 GPA, 96.5% avg**  
2019 – 2024

## SKILLS

### General

Data structures / OOP /  
algorithms / testing /  
technical communication /  
problem solving / RESTful  
API development

### Languages

Kotlin / Java / Python /  
JavaScript / C# / C++ / C /  
HTML / CSS / GraphQL /  
SQL

### Technologies/Libraries

Git / Android / ReactiveX,  
Kubernetes / OpenShift /  
Docker / Spring-boot /  
React.js

## HOBBIES

### Arts

Musical Improvisation /  
piano / sketching / painting  
/ guitar

### Sports

Downhill skiing / rock  
climbing / badminton /  
ping-pong

## RELEVANT WORK EXPERIENCE

### Splunk

*Incoming Software Engineer Intern (IoT Full-Stack)*

Sept. – Dec. 2021

### Uber

*Software Engineer Intern (Android)*

Jan. – April 2021

- Worked on Uber's new organization-wide **Android authentication** module using **Kotlin**
- Designed, implemented, and presented an improvement to social login on **Android**, achieving a **2-3%** lift in onboarding success
- Identified a signup and login **user experience** issue affecting **100,000 users/day**; used internal **dashboarding** tools to gather data and report impact

### Global Relay

*Co-op Software Developer (Backend)*

May – Aug. 2020

- Developed backend web microservices using **Java** and **Spring-boot**
- Designed, implemented, and presented a multi-microservice error handling strategy, which used **distributed tracing** to easily diagnose user issues
- Reduced vulnerabilities and code smells by over **90%** across five microservices using **SonarQube's** static code analysis tool
- Proposed and completed a major refactor of two **microservices**, which reduced complexity by removing a service layer for client requests to pass through
- Increased **Kubernetes** security by creating a **Docker** container to pull secrets at runtime

### Phoenix Data Consulting

*Cofounder and Software Engineer*

April – Aug. 2020

- Cofounded a pro-bono **data science** consulting company focused on non-profits
- Created a **deck.gl** layer that used a custom **spatial interpolation** algorithm, written in **JavaScript**, to help Indigenous communities better understand seasonal trends by visualizing temperature and salinity data for the water of the Hudson's Bay

## PROJECTS

### teagreen.ca

- Developed a music improvisation blog using **React.js** and **Gatsby.js** where I posted daily musical compositions
- Designed an easy to use web interface using **styled-components** and **CSS** to accommodate less technologically advanced family members
- Used **JavaScript** and **MobX** to create an audio player using that supports shuffle, track queues, and scrubbing

### Just Your Feedback

- Won SurveyMonkey's API prize at Hack the North 2019
- Developed a **Python/Pyramids** backend to an image recognition application that can detect thumbs up/down through a web camera and automatically submit a survey to SurveyMonkey

### Gyroll

- Created a gyroscope-controlled marble maze game using **C#, Unity, C**, and an **Arduino** on a team of four developers
- Simplified development by architecting an improved maze initialization process that used the object-oriented principles of **polymorphism** and **encapsulation**