

# William Qin

[williamqin.com](http://williamqin.com) | [hello@williamqin.com](mailto:hello@williamqin.com) | [williamqin](https://www.linkedin.com/in/williamqin) | [WilliamLQin](https://github.com/WilliamLQin)

## Education

---

### University of Waterloo | Software Engineering

Sep 2019 - Apr 2024

- 96.5% GPA, 1<sup>st</sup> in class Fall 2020 and Fall 2022
- Courses: Data Structures, Algorithms, Databases, Operating Systems, AI, ML, Networks, Security

## Experience

---

### Faire | Android Engineer | Waterloo, ON

Sep 2023 - Dec 2023

- Launched product page redesign for a **12.2%** increase in carousel GMV in **Kotlin** and **RxJava** Android app
- Led 4 projects to release with no critical bugs or latency regressions through effective design and test documentation
- Reduced code complexity with architecture migrations and component modularization within a **Gradle** build system

### Aven Financial | Full Stack Engineer | Burlingame, CA

Jan 2023 - Apr 2023

- Redesigned balance transfer product to **double \$ volume** (millions/month) by integrating **MethodFi** into a new flow
- Amplified card utilization with a 12% increase in balances by launching promotions with a 2.5x return on investment
- Reduced delinquency rate by 2% by moving 20.5% of users to use auto pay with a cashback incentive in **Vue** web app
- Architected new megaphone communication channel with a 9.2% click rate on a **PostgreSQL + Node** backend

### BitGo | Blockchain Integration Engineer | Palo Alto, CA

May 2022 - Aug 2022

- Increased revenue by over **\$300k** by integrating a top 25 cryptocurrency into the core **Node** and **Typescript** platform
- Ensured the safe launch of number type migration required by new cryptocurrency by writing extensive **Mocha** tests
- Fixed open source blockchain bugs and repackaged full node using **Docker** to generate tests and integrate it into CI

### Tesla | Embedded Systems Engineer | Palo Alto, CA

Sep 2021 - Dec 2021

- Raised validation confidence by building a test framework to run custom checks on 7500+ simulations with **Python**
- Integrated test framework into a CI process with hundreds of runs per day by using **Jenkins** and **SCons**
- Implemented new open loop simulation playback functions by designing a modified interpolation search in **Rust**

### Spatial | Full Stack Engineer | San Francisco, CA

Jan 2021 - Apr 2021

- Developed new pro subscription features to grow paying users by 10x by building on **Go** and **MongoDB** backend
- Added no auth flow to meetings in **TypeScript React** web app, converting 27% of users to create an account
- Eliminated deployment downtime by migrating web services infrastructure to **Kubernetes** and **Terraform**

## Projects

---

### UW Wave | Capstone Design Project

Sep 2022 - Present

- Led a team of 5 to launch a student job search tool, serving proven need for better UX and filtering on UW job board
- Built a browser extension to scrape jobs while maintaining student privacy, achieving 430+ users in the first week
- Enhanced job browsing by identifying keywords in **React** frontend with **NLTK** and **Hugging Face** ML transformers
- Refined filtering to achieve 14 min sessions and 9500+ searches in one month by deploying **Next.js** and **Lunr.js**

### Vision Motion | Android Application

Oct 2017 - Jan 2020

- Launched motion graphing app with 2270+ installs and 400+ peak active users by using **OpenCV** computer vision
- Deployed app into physics classrooms by connecting with educators to implement data export and tutorial features

### FIRST Robotics Team 4308 | 150 lb Robot

Sep 2015 - Jun 2019

- Led the team to be world championship semi-finalists in 2018 by building a semi-autonomous robot with **Java**
- Informed strategy and playoff selection by creating a **Firestore** web app to collect, display, and analyze team data

## Skills

---

**Languages:** TypeScript, JavaScript, Python, Kotlin, Java, SQL, C/C++, C#, Go, Rust, Scala, HTML, CSS/SCSS

**Web:** Node, React, React Native, Vue, Next.js, AWS, PostgreSQL, MongoDB, Kubernetes, Terraform, Firebase

**Tools:** Snowflake, Jest, Cypress, Mocha, Sentry, Superset, Docker, Unity, Git, Bash, Unix, Jenkins