# Ricky Mao

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**Languages**: JavaScript, TypeScript, Python, CSS, HTML, Swift, GraphQL, SQL, C++
**Libraries/Frameworks**: React, Next.js, Redux, Apollo, Node.js, Express, Angular, Feathers
**Technologies**: Firebase, Firestore, Docker, PostgreSQL, AWS, Figma

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## Education

**University of Waterloo** | Bachelor of Software Engineering                          *Sept. 2019 - Apr. 2024*

## Experiences

**Tesla** | Software Engineering Intern                          *May. 2022 - Aug. 2022*

- Created error components with **React** and **TypeScript** to help **over 200,000** Powerhub users repair errors.
- Pioneered server side rendering **React** components in **Next.js** for Tesla's Design System with 2 engineers.

**Shopify** | Software Developer Intern                          *Sept. 2021 - Dec. 2021*

- Engineered **React** components with **TypeScript** to enable **230,000 developers** to design Shopify extensions.
- Optimized code coverage by creating **Jest** tests for **React** components in Shopify's web client and library.

**Vretta** | Software Developer Intern                          *Jan. 2021 - Apr. 2021*

- Built dashboards to process **over 150,000** student test results for Canadian education ministries by leveraging **Angular**, **Express**, and **Feathers**.
- Overhauled Vretta's version control system using **Angular** services and components, allowing users to track changes when designing online exams.
- Devised and deployed an algorithm on **AWS Lambda** to calculate marker performances and developed schemas in **SQL** and API endpoints to manage marker statistics.

**Blueprint** | Software Developer                          *Jan. 2020 - Jan. 2021*

- Collaborated with a team of designers to create a web application that helps Waterloo Paramedic Services triage and process patients in events with **over 30,000 attendees**.
- Created UI components for hospital resource dashboards, using **TypeScript** and **React**, and leveraged **Apollo Client** to manage states with **GraphQL** integration.
- Implemented a **GraphQL** server to process patients and event data using **PostgreSQL** and **Apollo**.

**Quicktab** | Software Engineer Intern                          *May. 2020 - Aug. 2020*

- Led the scoping and creation of an order management web application currently used in 2 restaurants.
- Engineered dashboards that handle mobile orders and table assignments using **React/Redux** and **Firestore**.
- Built a QR code management tool using **Node.js**, **React**,and **Firestore**, decreasing restaurant QR code onboarding and maintenance time by ~**83%**.

## Projects

**Noisy Discord Bot**                          *Aug. 2020 - Dec. 2020*

- Built and designed a music-generating Discord bot installed in **over 230 servers** with 2 developers.
- Developed a landing page with ~**1000 monthly unique visitors** using **CSS**, **HTML**, and **JavaScript**.

**BCSS Wildcats iOS App**                          *June 2018 - Jan. 2020*

- Launched a smart planner used by **over 500 students** with a **4.6 rating** using **Swift** and **Firebase**.