# **Lawrence Qupty**

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#### Experience

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#### **Independent Contractor**

May 2023 – Aug 2023

Remote

• Was responsible for building Shopify web and mobile storefronts for 3 clients, implementing critical features such advanced search functionality, contributing to the improvement of \$26 million in combined sales revenue

- Used multiple web frameworks and tools across different clients including Node.js, Svelte, Vue.js, and GraphQL
- Gained experience in the relationship between fellow developers, designers, clients, and management

Vision

June 2022 – Mar 2023 Seattle, WA

Architected and engineered a decentralized platform for organization in a startup of 8 members as one of the
principal developers; think Kickstarter but with cryptocurrency

- Helped build the "Vision OS" allowing users to add plugins to the platform in a secure way, increasing development speeds and allowing Vision to become a viable product due to high extensibility and modularity
- Implemented the platform's UI in Typescript, React, and TailwindCSS allowing quick deployment, and used Rust for the Vision OS critically increasing the platform's performance
- Learned to quickly iterate on and learn many different technologies in a blindingly-fast startup environment

**Student Researcher** 

**Software Engineer** 

Sept 2021 – June 2022

University of Washington Najafian Lab

Seattle, WA

- Met with lab members on a weekly basis to learn about building machine-learning models to detect kidney diseases
- Developed a web app to interface with the lab's ML models using JavaScript, React, and React Bootstrap

#### Education

#### **University of Washington**

Seattle, Washington

Bachelor of Science in Computer Science (Magna Cum Laude)

3.94 GPA

- Coursework on highly scalable distributed and database management systems
- Focused on building mathematically rigorous yet highly practical software

### **Projects**

Husky Navigation Services: Java, Azure, JavaScript, HTML, CSS, Git

Repository

- **Husky Navigation**: A prototype web application for navigation at the University of Washington campus with interactive UI and REST API backend. Enables shortest-route calculation between buildings and key campus points in a modular and highly scalable way
- **Husky Navigation Content**: Tools that allow users to easily modify and develop mapping data, allowing crowd-sourced mapping localized. Used mapping libraries like Leaftlet.js
- **Husky Pack**: Hackathon project for a mobile interface for social media-like experience to a campus-based crowd-sourcing marketplace. Integrated with the Husky Navigation local mapping service to allow students to request to have things like food delivered to them

FitSocial: React Native, Rust, Git, Rocket, Expo, CSS, Git

Repository

- Designed a React Native frontend and Rust backend social media app with fitness tracking capabilities
- · Leveraged continuous integration on GitHub via GitHub Actions to automatically test and deploy the application
- Guided and taught my 4 other teammates Rust, React, and Typescript and lead the project using agile methodologies to 3x development speed and deliver a finished project

DSlabs: Java, Git

- Developed a sharded distributed KV store allowing for high-throughput ACID transactions
- Implemented distributed algorithms like primary-backup and Paxos providing fault-tolerance

## Skills

**Languages** : Rust, Java, Python, Javascript, Typescript, C/C++

**Technologies** : React, Node, Rocket, React Native, SQL, GraphQL, Pandas, PyTorch **Dev Tools** : Linux, Git, Emacs, Vim, Gitlab/Github, Docker, shell scripting