# Felix Liu

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#### EXPERIENCE

# Software Engineer

Apr 2023 - Aug 2023

Spurry Inc.

Toronto, ON, Canada

- Implemented 5 key features and fixed over 30 bugs, elevating the progress of the app to near deployment
- Synced user subscriptions with Stripe, creating smooth and transparent payment experience to the users
- Automated deployment using Github Actions to Google Cloud, allowing for smooth and quick update of the app
- Integrated VertexAI into backend API, handling user inquiries in real time with flexibility and ease
- Optimized the code generation algorithm, reducing resource consumption by 80%

#### Full-stack Developer

Sep 2022 - Dec 2022

University of Waterloo

Waterloo, ON, Canada

- Employed caching and pagination techniques with React/Typescript, reducing run time by 16 times
- Synchronized database with Zotero using GO and Container, eliminating collision problem and speeding up collaboration between researchers
- Automated citation using source information, speeding up user's citation process by over 5 times
- Created profile management page using React/Typescript with MVC architecture, engaging users across the world to join the research of rhetorical figures

## Software Engineer

Sep 2021 - Apr 2022

Vancouver, BC, Canada

Uncaught Exception Inc.

- Engineered efficient data structure for processing of long strings by dividing it into logical components using dart, speeding up code generation algorithm from quadratic to linear time
- Updated third party packages using dart, cutting development time by over a month
- Implemented a Figma plugin using React/Javascript, creating a clean, intuitive interface for code customization
- Developed to-scale diagrams of triangle, circle, and rafters with editable parameters using Flutter/Dart, distinguishing the construction calculator from the competitors
- Unified theme across app, providing a clean consistent design that is maintainable
- Refactored over a thousand lines of code by applying the principles of OOP, improving readability, maintainability, and minimizing future development time

## PROJECTS

#### **Ripple** | React/Typescript

February 2023 - April 2023

- A sandbox that emulates dyed ripples on the surface of water
- Used colored boxes and the expanding of color onto nearby boxes to create animation of ripples and interference
- Ensured that page is responsive to screen size changes without losing states

## Connect Five | Flutter/Dart

May 2023 – July 2023

- A single player board game based on the game Five In a Line
- Separated concerns and developed scalable code using the MVVM architecture

## EDUCATION

## University of Waterloo

Waterloo, ON

Bachelor of Computer Science

Sep 2020 - Apr 2025

Relevant Coursework: Algorithms/Data Structures, ML, Cryptography, OS, OOP, Network

## TECHNICAL SKILLS

Languages: React, Typescript, Javascript, HTML, CSS, Flutter/Dart, Kotlin, Go, Python, C++

**Technology**: Linux, Git, Docker, Google Cloud, Microsoft Azure