Tailai Wang
University of Waterloo Computer Science and Business Student

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Technical Skills

Languages:	Python, Swift, C/C++, JavaScript, Java, Scheme, SQL, HTML/CSS
Frameworks/Libraries:	React, Express, Node.js, Bootstrap, MaterialUI, UIKit, SwiftUI, REST, GraphQL
Data:	Matplotlib, sklearn, MongoDB, DynamoDB, Firestore, S3, MySQL

Experience

Tile　　　　　　　　　　　　　　　　　　　　　　　　　　　　Jan 2022 - Apr 2022
Software Engineering Intern - Platform　　　　　　　　　　　*San Mateo, CA (Remote)*
- Introduced accessibility fonts to **100k+ users** by implementing **DynamicType infrastructure**
- Sped up app build time by **over 20%** by implementing XCFrameworks and compiler optimizations
- Validated algorithms for new AR features using Ultra Wideband Data through **sklearn** and **matplotlib**
- Improved new micro-app architecture by migrating deprecated core features from **Objective-C** to **Swift**

Sonova Innovation Lab　　　　　　　　　　　　　　　　　　Jan 2021 - Apr 2021
Software Developer Intern　　　　　　　　　　　　　　　　　*Kitchener, ON (Remote)*
- Spearheaded development and architecture of Hearing Aids Finder application for iOS and iPadOS
- Used Core Bluetooth and Core Location through **Swift** to create **3 Bluetooth Proximity features**
- Increased reusability by refactoring **Objective-C** code to implement location-logging triggers
- Reduced test time by **50%** by streamlining QA process for a Google Assistant Action using **Flask**

Questrade Financial Group　　　　　　　　　　　　　　　　Apr 2020 - Aug 2020
Production Engineering Intern　　　　　　　　　　　　　　　*Toronto, ON (Remote)*
- Cut response times by **90%** by automating **company-wide** alerts using **JavaScript** & **G-Suite API**
- Developed HRM app using **MERN** stack, enabling incident simulation training and team analytics
- Performed key data fixes for Business Intelligence on **MySQL** ledgers involving **over 10,000** accounts

Projects

Clove - Product Link　　　　　　　　　　　　　　　　　　　Jan 2021 - Apr 2022
- **Founding engineer** on sustainability startup seeking funding for Toronto-based pilot program
- Headed implementation of pastable code snippet for **10 online businesses** using **Next.js** and **Firebase**
- Architected token management system for **Shopify OAuth** and **Payments** with a **GraphQL API**

To The Moon - Devpost Link　　　　　　　　　　　　　　　Jan 2021 - Mar 2021
- Scraped *r/wallstreetbets* using **PRAW** on to aggregate stock discussion posts in a data pipeline
- Developed **Flask API** with **Google Cloud NLP** to make stock picks through market sentiment analysis
- Made **React.js** charts to showcase **over 50** most bullish/bearish stocks traded on NYSE/NASDAQ

Sorcery　　　　　　　　　　　　　　　　　　　　　　　　Nov 2020 - Dec 2020
- Two-player card game inspired by Yu-Gi-Oh/Hearthstone, played on a **C++ command line interface**
- Designed **MVC Architecture** to support multiple interfaces with reusable cards and scoring systems
- Implemented **decorator design pattern** to create player enchantments and other custom cards

MomsOverMatter - Product Link　　　　　　　　　　　　　Apr 2020 - Aug 2020
- Medical information web app for postpartum depression built with **React, Express** and **PostgreSQL**
- Created modular React components to support paginated quizzes, infographics, and user profiles
- **Halved administration time** by building **REST API** endpoints with Express to export surveys

Leadership

Hack the North - hackthenorth.com　　　　　　　　　　　　Mar. 2022 - Present
Logistics Team Lead
- Organizing Logistics for **Canada's biggest hackathon**, serving 1500+ participants each year
- Managing **$XXX,XXX** logistics budget to deliver existing projects and new strategic initiatives

Laurier Case Team - lauriercaseteam.ca　　　　　　　　　　Aug. 2020 - Present
International Competitor (22-23), Co-Captain (21-22), Competitor - Digital Strategy (20-21)
- Training to compete internationally at **Rotterdam UAS** against the world's top case students
- Led **50+ students** on one of Canada's most decorated undergraduate case teams as academic captain
- Solved and presented case problems in **digitalization**, **tech consulting**, and **business innovation**

Education

University of Waterloo　　　　　　　　　　　　　　　　Sep 2019 - Apr-2024 (expected)
BCS/BBA Computer Science and Business Administration (Double Degree)　　*Waterloo, Canada*