Tailai Wang
Computer Science and Business Administration Double Degree Student

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Technical Skills

Programming Languages:	Python, Swift, C/C++, JavaScript, Java, Scheme, SQL
Frameworks/Tools:	MongoDB, Express.js, React.js, Node.js, GraphQL, AWS, GCP, Git

Experience

Tile   January 2022 - April 2022
Software Engineering Intern - iOS Platform   *San Mateo, California*
- Sped up app build time by **over 20%** by implementing XCFrameworks and compiler optimizations
- Validated characterization algorithms for Ultra Wideband (UWB) Data using **sklearn** and **matplotlib**
- Implemented new app-wide **DynamicType** services to follow **Apple Human Interface Guidelines**
- Improved new architecture framework by migrating views and view controllers from Objective-C to Swift

Sonova Innovation Lab   Jan 2021 - Apr 2021
Software Developer Intern - iOS   *Kitchener, Canada*
- Spearheaded development of Hearing Aids Finder application for iOS
- 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
- Streamlined QA process for a **Google Assistant Action** using **Flask**, drastically reducing test time

Questrade Financial Group   Apr 2020 - Aug 2020
Production Engineering Intern   *Toronto, Canada*
- 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 10000** accounts

Leadership

Hack the North - hackthenorth.com   Hackathon Organization
Logistics Team Lead (2022-Present)
- Organizing Logistics for Canada's biggest hackathon, **serving 1500+** participants a year
- Managing **$XXX,XXX** logistics budget to deliver existing projects and new initiatives
- Leading organizers to execute judging, registration, mentorship, activites and other key deliverables

Clove - clove.eco   Entrepreneurship
Tech Lead (2021-Present)
- Executed technical development of mission-critical Shopify app plugin using **Node.js** and **Liquid**
- Headed implementation of **3+ iterations** of pastable code snippet using **Next.js** and **Firebase**
- Advised co-founders on product strategy, ideation, and value proposition throughout initial fundraising

Laurier Case Team - lauriercaseteam.ca   Case Competitions
International Competitor (2022-23), Co-Captain (2021-22), Competitor - Digital Strategy (2020-21)
- Led **50+ students** on one of Canada's leading undergraduate case teams as academic captain
- Solved and presented case problems in **digitalization**, **tech consulting**, and **business innovation**

Projects

MomsOverMatter - Product Link   lleTTonna
- Developed *MomsOverMatter*, a free medical information tool for depression treatment for new mothers
- Used **PostgreSQL** and the **MERN** stack to implement questionnaire features and web app components
- Created standardized **Express.js** endpoints to export surveys to doctors, **halving administration time**

Lyricalculus - Devpost Link   Hack the North 2021
- Led project ideation and design of a web application that evaluates song lyrics using ML and NLP
- Created processing system for **3000+** songs, performing **lexicographic and NLP semantic analysis**
- Trained and deployed **scikit-learn** ML model to analyze lyrics at **nearly 80%** accuracy

To The Moon - Devpost Link   Hack the North 2020++
- 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 **almost 50** most bullish/bearish stocks traded on NYSE/NASDAQ

Education

University of Waterloo and Wilfrid Laurier University   Sep 2019 - Present
BCS/BBA Computer Science and Business Administration (Double Degree)   *Waterloo, Canada*
- **Awards**: J. Wesley Graham National Scholarship (2019), Term Dean's Honours List (2020, 2021, 2022)
- **Interests**: Fitness, Sustainability, Global Affairs, Financial Markets, anything that ends with "ball"