

# TAILAI WANG

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## TECHNICAL SKILLS

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

## EXPERIENCE

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- Tile** Jan 2022 - Apr 2022  
*Software Engineering Intern - Platform* San Mateo, CA (Remote)  
• Implemented **DynamicType infrastructure** to introduce accessibility fonts to **100k+ users**  
• 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**  
• 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* 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  
• 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, 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 10000** accounts

## PROJECTS

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- 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 **almost 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  
• Built **REST API** endpoints with **Express** to export surveys to doctors, **halving administration time**

## LEADERSHIP

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- 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

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- University of Waterloo** Sep 2019 - Present  
BCS/BBA Computer Science and Business Administration (Double Degree) Waterloo, Canada  
• **Interests:** Fitness, Sustainability, Hip-Hop, Financial Markets, anything that ends with "ball"