AILAI WANG

University of Waterloo Computer Science and Business Student

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TECHNICAL SKILLS

Python, Swift, C/C++, JavaScript, Java, Scheme, SQL, HTML/CSS Languages:

Frameworks/Libraries: React, Express, Node.js, Bootstrap, MaterialUI, UIKit, SwiftUI, REST, GraphQL

Matplotlib, sklearn, MongoDB, DynamoDB, Firestore, S3, MySQL Data:

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 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
- ullet Reduced test time by 50% by streamlining QA process for a Google Assistant Action using Flask

Questrade Financial Group

Apr 2020 - Aug 2020

Toronto, ON (Remote) Production Engineering Intern • 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

 ${\bf MomsOverMatter} - \underline{{\rm Product\ Link}}$

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