GORDON NG

Montreal, Canada | gordon.ng@mail.mcgill.ca | linkedin.com/in/gordonng03 | github.com/SoloUnity | My Website

Skills

Languages: Swift, Python, Java (Proficient), JavaScript, Bash, SQL (Intermediate)

Technologies: SwiftUI, UIKit, Combine, Firebase, Bootstrap, Git, Docker, Confluence, Jenkin, Jira

Spoken: English, French (Fluent), Mandarin, Cantonese (Intermediate)

Experience

Software Engineering Intern BetterSleep

Sep 2024 – Dec 2024

- Developed in Swift for SwiftUI and UIKit inside of a MVC, MVVM hybrid architecture audio application
- Leveraged Combine to build a sound interface, delivering real-time scheduling updates
- Improved app exploration by 35% using Mixpanel statistics driven development
- Collaborated on the development of internal Bash scripts to automate developer onboarding

Software Engineering Intern

May 2023 - Aug 2023

TouchTunes

- Developed in **Swift** for **UIKit** inside of a **MVC** architecture driven music application
- Led AB Test development with Jenkin and Firebase for a feature netting a 25% increase in engagement
- Optimized runtime performance by 20% through addressing deprecated Swift components
- Resolved a critical payment service outage in production impacting 10,000+ users
- Enhanced unit test coverage by 30% and contributing Confluence documentation for code maintainability

Projects

Valorant Store Checker

Jun 2022

- Created a SwiftUI game companion application in Swift with 350,000+ downloads and 50,000+ users
- Employed the MVVM design pattern and 4 REST APIs to enhance application scalability
- Improved access to third party game content by up to 500% faster compared to the existing solution
- Optimized app loading times through asynchronous data fetching and caching
- Collaborated with developers through GitHub and beta testers through TestFlight

Al Game Agent Dec 2023

- Achieved a 90th percentile ranking in a round robin tournament versus other Al agents in Python
- Leveraged alpha-beta pruning with a transposition table and iterative deepening search strategies
- Employed a genetic algorithm with crossover and mutation techniques to optimize heuristic weights

GoodLuckTruck Nov 2023

- Developed a full stack Swift and SwiftUI trucking application drawing from a Python backend
- Utilized geospatial KD-Tree for parsing MQTT data streams to push notifications based on truck location
- Leveraged WebSockets to push and filter notifications based on location data and preferences
- Optimized shipping routes using the Haversine formula to suggest loads based on route profitability

Education

Software Engineering BSC McGill University

Expected Graduation May 2026

- Data Structures & Algorithms, Databases, Operating Systems, Artificial Intelligence
- Vice President of External Affairs of HKSN, an East Asian culture club