

# GORDON NG

Montreal, Canada || [gordon.ng@mail.mcgill.ca](mailto:gordon.ng@mail.mcgill.ca) || [gordonng.ca](http://gordonng.ca) || [github.com/SoloUnity](https://github.com/SoloUnity) || [linkedin.com/in/gordonng03](https://linkedin.com/in/gordonng03)

## Education

### Software Engineering B.Sc.

Graduation Fall 2026

McGill University

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

## Experience

### Intact Insurance | Software Developer Intern

May 2025 - Aug 2025

Java, Spring Boot, AWS S3, Maven, BFF, Swift, SwiftUI, MVVM

- Reduced claims processing time by **35%** by delivering a property tracking feature with **Spring Boot** for **1M+ policy holders**
- Lowered file selection time by **70%** by implementing **concurrent processing**, improving claim submission speed
- Scaled file upload capacity by **10x** by implementing an **AWS S3** multipart upload solution
- Achieved **80%** test coverage by building automated testing tools, decreasing QA cycle time by **10%**

### BetterSleep | Software Developer Intern

Sep 2024 - Dec 2024

Tensorflow, Python, Realtime Database, Firestore, Swift, SwiftUI, MVC

- Improved audio categorization accuracy by **15%** using **Tensorflow** sound models, enhancing statistics for **10M+ users**
- Reduced memory footprint by **10%** by architecting a **Factory pattern** with **dependency injection**, improving performance
- Delivered real-time content feed with **Firebase**, serving millions of requests with sub-second load times

### HKSN Student Club | Web Developer

Aug 2024 - Dec 2024

JavaScript, Bootstrap, HTML, CSS

- Increased club engagement by **10%** with a dynamic website using **JSON-driven** UI components, reaching 300+ members

### TouchTunes | Software Developer Intern

May 2023 - Aug 2023

Mixpanel, Jenkins, Firestore, Swift, MVC

- Restored payment processing for **50K+ users** by resolving a critical **production outage**, maintaining payment operations
- Developed **A/B test** of music queue feature with 30K users, increasing engagement by **15%** and driving full rollout
- Supported **2M+ monthly active users** by building scalable features in MVC architecture

## Projects

### Mobile Gaming Application

Swift, SwiftUI, Concurrency, REST API

- Enabled access to third party game content over **250% faster** for **50,000+** monthly **active users** with **350,000+ downloads**

### Rock Climbing Social Network

AWS S3, Firebase (Auth, Firestore, Storage), Swift, SwiftUI, Concurrency, SwiftData, MVVM

- Building iOS climbing social app using **Swift/SwiftUI** with **Firebase** Auth, Firestore, and Storage in **MVVM** architecture
- Architected hybrid storage solution using Firebase **Firestore** for social graph, with **AWS S3** for scalable media hosting

### Distributed Consensus System with Paxos

Java, Paxos Algorithm, Distributed Systems

- Implemented **Paxos** consensus algorithm achieving total order delivery across distributed game servers, handling concurrent proposals and process failures using majority consensus

### yapOS

C, Unix Operating Systems, Process Scheduling, Memory Management, File Systems

- Developed **Unix-like** OS kernel with REPL shell, FAT-style file system, and demand-paged memory management

## Skills

**Languages:** Swift, Python, Java (Proficient), C, JavaScript, SQL, HTML, CSS (Intermediate)

**Technologies:** Spring Boot, SwiftUI, Tensorflow, Bootstrap, AWS S3, Firebase, Maven, Jenkins, Mixpanel, REST API, SwiftData

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