GORDON NG

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Education

Bachelor of Science in Software Engineering   Graduation Fall 2026
McGill University   GPA: 3.53/4.0

- Distributed Systems, Operating Systems, Databases, Artificial Intelligence, Machine Learning, DevOps
- Vice President of External Affairs, HKSN (Hong Kong Student Network)

Experience

Intact Insurance | Software Engineer Intern   May 2025 - Aug 2025
Spring Boot, Java, AWS S3, Maven, BFF, Swift, SwiftUI

- 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 Engineer Intern   Sep 2024 - Dec 2024
Tensorflow, Python, Firebase (Firestore, Real Time Database), Swift, SwiftUI

- Improved audio categorization accuracy by **15%** using **Tensorflow** sound models, enhancing statistics for 10M+ users
- Reduced memory footprint by **10%** by architecting a with **dependency injection**, improving performance
- Delivered real-time content feed with **Firebase**, serving millions of requests with sub-second load times
- Collaborated on the development of internal **Bash** scripts for automated developer onboarding

TouchTunes | Software Engineer 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 for 30K users, increasing engagement by **15%** and driving full rollout
- Authored targeted unit tests using **XCTest**, improving test coverage by **25%**

Projects

Valorant Game Tracker Application
Swift, SwiftUI

- Developed open-source **viral iOS** game content tracker over to **50,000+** monthly **active users** with **350,000+ downloads**
- Architected zero-trust authentication with **Keychain encryption** and cookie-based sessions
- Enabled faster access to in game content by over **500%** within a **Swift** and **SwiftUI** application

Rock Climbing Social Network
AWS S3, Firebase (Auth, Firestore, Storage), Swift, SwiftUI, Concurrency, SwiftData

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

Paxos Distributed Consensus System
Java, Paxos Algorithm, Distributed Systems

- Engineered a fault-tolerant middleware layer implementing the **Paxos consensus algorithm** to guarantee **total order delivery** of messages across distributed application instances
- Developed an **automated testing framework** using **Bash** to benchmark throughput and latency, achieving a peak performance of approximately 716 updates/second in low-latency environments
- Orchestrated **leader election** and majority-consensus logic to maintain system consistency despite simulated process failures and **network partitions**

Skills

Languages: Swift, Python, Java, C
Technologies: Spring Boot, SwiftUI, Tensorflow, BootStrap, AWS S3, Firebase, Maven, Jenkins, Mixpanel, REST API, SwiftData