

# Mayank Mehra

☎ 647-564-5687 | ✉ m4mehra@uwaterloo.ca | 🏠 mayankmehra.vercel.app | 🌐 github.com/Mayank808 | in linkedin.com/in/mayank808

## Education

### University of Waterloo

Expected Graduation: Apr. 2026

Bachelor of Computer Science (Co-op) BCS

GPA: 3.8

Relevant Coursework: Data Structures & Algorithms, Operating Systems, OOP, Machine Learning, Artificial Intelligence, Distributed Systems

Extracurriculars: [Class Profile](#) Project Manager - UW CS Club, Sponsorship Coordinator - [TOHacks](#), Mentor - [Canada Learning Code](#)

## Skills

**Languages** Python, TypeScript, Javascript, Swift, C++, C, Kotlin, Go, SQL, Dart, Java

**Technologies/Frameworks** Nextjs, Angular, SwiftUI, NestJs, Express, Nodejs, PyTorch, Flutter, AirFlow, PySpark, Pandas, OpenCV, NumPy

**Tools** Azure, AWS, Git, Docker, Bash, Jenkins, Postman, Cypress, Jest, Jira, ELK, Datadog, Snowflake, Figma, Blender

## Experience

### Software Engineer | Faire - Retailer Order Placement | Toronto, ON

May 2024 - Expected End: Aug. 2024

- Redesigning and migrating the Cart and Checkout experience to new architecture in SwiftUI for [Retailer iOS app](#) that introduces 700,000+ retailers to shop over 100,000 independent brands.
- Improving speed and efficiency for cart and checkout endpoints using Kotlin and Datadog to boost user experience.
- Releasing new owned features as A/B experiments to analyze effects on metrics such as GMV and order count.
- Implementing analytics/network logging and deep links support for iOS apps through an internal developer tool built in SwiftUI using Network, Combine, and Muipeer libraries. Simplifying developer debugging and app navigation.

### Full Stack & Data Engineer | RBC - Investor Services | Toronto, ON

Aug. 2023 - Apr. 2024

- Spearheaded the planning, development, and deployment of a new admin permissioning workbench on [RBC One](#). Angular-based portal allows over 2000 clients to manage access to portfolio and investment data efficiently.
- Implemented and maintained RESTful APIs exposed to users and admin portal, executing business logic, CRUD operations, pagination, and search functionalities using NestJS, TypeORM, and Typescript.
- Created comprehensive test suites covering functional, unit, integration, and penetration testing for API endpoints and frontend components. Utilized Jest, Cypress, and Postman to achieve 95% test coverage.
- Developed a data seeder for local development to streamline database setup and testing processes.
- Developed DAGs using Apache Airflow to orchestrate flexible parameter-driven ETL workflows. Achieved a 60% reduction in data processing time through efficient data quality checks, cleaning, and ingestion using PySpark.

### Software Engineer | Radish | Montreal, QC

Jan. 2023 - May 2023

- Developed microservices using Express.js, Node.js, and Azure to manage diverse requests, including Wix webhooks.
- Implemented CI/CD pipelines with Docker and GitHub Actions for efficient project deployment on Azure.
- Deployed a serverless CV and OCR app on Azure to automate high-accuracy ID validation using Python, Expressjs, OpenCV, Pytesseract, and Azure Functions.
- Spearheaded new iOS app project built using SwiftUI and a CLEAN architecture to facilitate order operations for 15+ delivery drivers through a reactive data flow, increasing driver efficiency by 35% and reducing order delivery times.
- Utilized Combine, MapKit, SocketIO, and CoreLocation to create features like real-time navigation and order tracking.
- Designed and published a [document scanner iOS framework](#) using AVFoundation, Vision, and SwiftUI enabling automatic detection, scanning, and cropping of documents with high precision.

### Full Stack & Mobile Developer | UGO - TD Bank | Toronto, ON

May 2022 - Aug. 2022

- Implemented a responsive order flow for a [Cineplex Gift Card Portal](#) using Angular. Leveraged CRUD operations to verify, create, and retrieve product or client data.
- Designed a property search iOS app using SwiftUI (UIKit), REST APIs, and MapKit. Implemented pagination, location-based property search, and rendering dynamic map data to streamline users' property search experience.
- Redesigned Angular sales portals for 5000+ active customers, adding mobile responsiveness and accessibility.
- Developed a Jenkins pipeline with Python and Fastlane to capture iOS app UI screenshots during builds, saving 5-8 hours weekly for QA. Presented this feature to the infrastructure team for future CI/CD pipeline improvements.

## Projects

### ScribeMe | Sentiment Analysis Web App 🌐

- Implemented a sentiment analysis journaling app using NextJS, Prisma, Langchain, and OpenAI APIs allowing users to track, question, and understand their journal entries over time.

### Chess | C++ Object Oriented Programming Project 🎮

- Designed a Chess game in C++ with both text-based and graphical interfaces, utilizing OOP principles and design patterns like Observer, Strategy, and MVC.

### UniFinder | Mobile App Development | Hack The North 📱

- Developed a Flutter app using Firebase Rest APIs that helps university applicants stay updated with news, programs, and application schedules for all universities on one platform.

### NFTmint | Web3 Flutter App | Proof of Concept 🔗

- Developed a Minting app that simplifies NFT creation for users. Built through an Express microservice that handle's ERC-721 contract generation and the minting process using Ethers, Hardhat, and Solidity on the Polygon Testnet.