Martin Cai

Vancouver, British Columbia, Canada

📞 778-680-0563 ✉ martincai46@gmail.com 🔗 in/martincai-ubc ⃝ martinc8

EDUCATION

University of British Columbia Sep. 2020 – May 2025 (Expected)
B.Sc. in Computer Science *Vancouver, BC*

EXPERIENCE

Backend Developer Intern | *Later.com* May 2022 – Dec 2022
Ruby, Rails, AWS S3, PostgreSQL, CircleCI, Heroku *Vancouver, BC*
- Architected and implemented a robust media pipeline using **Ruby on Rails** and **AWS S3** to efficiently process and store high volumes of user-uploaded images
- Scaled the pipeline to allow **800+** brands to add images to their influencer marketing campaigns
- Engineered a flexible attachment system that allowed for new attachments to be added without modifying the database schema by creating custom services, endpoints, and controllers, reducing future development time from days to minutes
- Boosted customer engagement by **15%+** through the implementation of personalized transactional emails, notifying brands of new applicants to their campaigns
- Led successful upgrade of the backend codebase from Ruby 2 to 3, updating **50+** gem dependencies and refactoring outdated code for improved performance and maintainability

Co-President | *nwPlus UBC* Oct. 2021 – Present
- Leading and managing **50** members of **8** subteams to enable the execution of 3 of Western Canada's largest hackathons (nwHacks, cmd-f, HackCamp), totalling **1500+** participants annually
- Spearheaded logistics for nwHacks 2023, Western Canada's largest hackathon, attracting **650+** participants (**56%** first-time hackers), **131** project submissions, and offering **$23,000** in prizes

TECHNICAL PROJECTS

Expawdition | *Next.js, Firebase, Express, React, Node.js, Typescript* **Stormhacks 2023—1st place**
- Developed an AI trip planner to generate personalized itineraries for users based on factors such as budget, group-size, transportation methods, and accessibility needs
- Leveraged the **GPT-3.5** model, **Google Places API** and **Google Routes API** to optimize itineraries using real-time data
- Designed a user-friendly interface using **Chakra UI** React components and custom Figma illustrations
- Collaborated with a team of 4, including a Project Manager, a Designer, and 2 Developers to transform a Figma prototype into a fully functional web application in 24 hours

SketchConnect | *React, Redux, Node.js, Express.js, MongoDB, Socket.IO*
- Developed a real-time, collaborative doodling platform using the **MERN** stack, enabling groups of 4 players to sequentially draw in quadrants, which are then combined to reveal a shared piece of artwork.
- Leveraged **Socket.IO** for efficient data broadcasting between users and the server, ensuring seamless real-time updates in a multiplayer game
- Constructed an interactive interface with React and implemented Redux for state management to optimize data flow

Materials Inventory | *Python, Flask, PostgreSQL, HTML/CSS, Heroku*
- Designed and developed a web-based database management system to efficiently track inventory for a local jewelry business
- Engineered a robust backend system to perform CRUD actions on **300+** inventory items across 12 categories, utilizing **PostgreSQL**, **Python**, and **Flask** to ensure reliability and scalability

Grounded | *Python, Javascript, HTML/CSS, Heroku* **Stormhacks 2022—Best UI/UX Award, Top 10 Overall**
- Developed a responsive web application that provides interactive grounding exercises for panic attack first-aid, supporting the user's mental stability during times of distress

TECHNICAL SKILLS

Programming Languages: Javascript, Typescript, Ruby, Python, Java, HTML/CSS
Tools & Frameworks: React, Rails, Node.js, Express.js, Flask, Redux, Next.js, Socket.IO, Chakra UI, Git, Vercel, Heroku
Databases: Firebase, MongoDB, AWS S3, SQL, PostgreSQL