

Elijah Zhao

(306)-477-1048 | elijahzhao24@gmail.com | [linkedin.com/in/elijahzhao24](https://www.linkedin.com/in/elijahzhao24) | elijahzhao.com

EDUCATION

University of British Columbia

Bachelor of Science, Major in Computer Science, Minor in Math

GPA: 4.0

Expected Graduation: May 2027

TECHNICAL EXPERIENCE

Software Developer Intern

Nexera Robotics

January 2026 – April 2026

Vancouver, BC

- Led redesign of a robotic pick-cycle pipeline in **Python/C++**, parallelizing ML inference and NumPy-based decision logic with **Ray Core** and optimizing critical paths in C++, improving throughput by **30%** (7→10 picks/min).
- Built internal robotics tooling in **Python/PostgreSQL** interfacing with **Universal Robots** firmware APIs, shipping **5+ features** including custom speed/pathing controls and performance tracking to identify system bottlenecks.
- Developed a **dataset curation pipeline** that reduced **1M+** unfiltered images to **7K** using **DINOv2 embeddings** and **pgvector** similarity search for deduplication and sampling; stored images in **S3** and metadata/vectors in **RDS**.

Software Development Lead

UBC BizTech

August 2025 – Present

Vancouver, BC

- Leading development of platforms for hackathons and conferences at UBC's largest tech club, used by **1,900+** users
- Built a **serverless** backend stack with **AWS Lambda** to manage authentication, payments, and event workflows; securely integrated **Stripe webhooks** to automate **\$20K+** in membership payments and event confirmations.
- Designed **DynamoDB** access patterns with **GSI**s enabling queries across **9+** events and **800+** members.
- Used **AWS CloudFormation (YAML)** to manage infrastructure across dev/prod environments.
- Built a membership portal, NFC networking system, and mock stock exchange with **TypeScript** and **Next.js**.

Undergraduate Teaching Assistant - CPSC 221

University of British Columbia

January 2026 – Present

Vancouver, BC

- Mentored **110+** students during lectures and weekly labs, teaching **data structures and algorithms** in **C++**

Software Development Engineering Intern

Woohelps International Technology LTD

May 2024 – August 2024

Saskatoon, SK

- Built an apartment platform (**React, Django, PostgreSQL**) serving **~400** weekly users; developed REST APIs handling **1.5k** requests/day and implemented **S3 presigned** uploads, offloading image transfer from the backend.
- Integrated the WeChat API for OAuth authentication, enabling cross-platform login used by **~80%** of users.

PROJECTS

BizBot (NwHacks 2026) | *Supabase, YOLOv8, FastAPI, Next.js, Google Gemini*

January 2026

- Won **Best Real-World Ready AI Product** (Block) among **630+** hackers by building BIZBOT, an autonomous robot photographer that captures photos and auto-publishes a curated live gallery using an AI quality gate.
- Designed an **automated** photo capture-to-publish pipeline utilizing **Gemini** to score image quality, store metadata in **Supabase (Buckets + Postgres)**, and serve a gallery with only photos above a configurable threshold.
- Built a **computer vision** loop using **YOLOv8, DBSCAN** for group detection and autonomous photo capture.

Remember Me (Surge 2025) | *Flask, AWS (DynamoDB, S3, Rekognition), React Native*

October 2025

- Achieved **top 5 out of 200** teams with an assistive camera companion that recognizes familiar faces and announces names, relationships, and reminders to help Alzheimer's patients stay connected.
- Built a **Flask** backend using **OpenCV** for real-time streaming and **AWS Rekognition** for face ID
- Designed a **React Native** app to manage memory albums. Persisted profiles to **AWS S3 and DynamoDB**

NBAalary | *Spring Boot, JPA, Python, Java, React, TailwindCSS*

August 2025 – September 2025

- Built a full-stack CRUD app with a **Spring Boot** backend, modeling relational entities and using **Spring Data JPA** for ORM and custom queries on **PostgreSQL**; integrated with a **React** frontend to visualize salary cap data.

TECHNICAL SKILLS

Languages: C++, Python, Java, C, JavaScript/TypeScript, SQL (PostgreSQL + pgvector)

Frameworks & ML: Spring Boot, Next.js, React, Node.js, FastAPI, Django, Ray, YOLOv8, OpenCV

Cloud & Infrastructure: AWS (Lambda/DynamoDB/S3/Amplify/EC2/RDS/IaC), Supabase, Docker, Git, Linux