# Maggie Gu

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mgu83.github.io

## Education

## **University of British Columbia**

May 2025

Bachelor of Applied Science in Computer Engineering

Vancouver, BC

Captain @ UBC Biomedical Engineering Student Team, Residence Advisor, Undergraduate Research Assistant

# Experience

Cohere March 2025 - June 2025

Senior Data Quality Specialist

Remote

- Annotated and structured code in various programming languages to support training of large language models for code generation and understanding
- Conducted peer reviews of annotated code to ensure quality control and adherence to annotation standards
- Labeled and categorized code examples by difficulty, domain, and functionality for machine learning dataset curation

Amazon June 2024 - August 2024

Software Development Engineer Intern

Vancouver, BC

- Developed & migrated AWS CloudMap Service Discovery to open-source framework using Java and Ruby
- Wrote contract and integration tests to validate new implementation's integration to AWS CloudFormation
- Migration eliminated cost associated with database storage for team and improved customer experience by offering drift detection and access to AWS Cloud Control API and other CloudFormation features

# **UBC Software Analysis and Testing Research Lab**

May 2024 - June 2024

Research Assistant Vancouver, BC

- Developed LLM-agent for generating code patches based on contextual analysis using Python
- Built extensions on OpenDevin used to test agent in comparison to other benchmarks

**Broadsight Tracker** March 2023 - June 2024

Full-Stack Developer

Remote

- Implemented a new feature using React, resulting in 35% increase in new user interest within the first month
- Authored 20+ unit tests using Jest leading to a 10% reduction in average weekly reported issues
- · Spearheaded OWASP security assessments across the infrastructure with focus on code injection attacks

**OVCARE** April 2023 - August 2023

Data Engineer Vancouver, BC

- Designed data pipeline using R, Python, and SQL currently being used across 5 research labs
- Developed graph algorithms to implement database schemas to detect and model trends with 84% accuracy
- · Automated recurring data retrieval with Python scripts, eliminating the need for costly third-party API calls

Tesla February 2022 - August 2022

Project Management Intern

Fremont, CA

- Managed multiple infrastructure improvement projects, valued up to \$4.3 million, for Models 3 & Y
- Developed a Python script to organize photos based on metadata, reducing man-hours spent sorting by 70%
- · Led assessment study to determine viable solutions for time-logging issue including wire-frame developments

### **UBC Department of Civil Engineering**

November 2021 - April 2022

**Undergraduate Research Assistant** 

Vancouver, BC

- Developed Python program to model environmental impact through infrastructures' lifetime
- Optimized simulation processing performance and data validation in computations by 20% by implementing bandpass metrics and leveraging caching through dynamic calculation and array vectorization

### Vancouver General Hospital

October 2020 - March 2021

Software Engineer Vancouver, BC

Contributed 10K+ lines of code in React to patient flow tracker app for Radiology Department

# **Technical Skills**

Languages: Python, Java, C++, R, SQL, JavaScript

Machine Learning & Data Science: PyTorch, TensorFlow, Hugging Face, OpenCV, scikit-learn, pandas, NumPy, testthat Frameworks & Infrastructure: FastAPI, Flask, Django, React, Next.js, Express.js, Docker, AWS, MySQL, MongoDB, Redis