

Jessica Ngo

Vancouver, British Columbia, Canada | Email: jessica.ngo@live.com | Github: <https://github.com/JessicaNgo>

Skills

- Python, Java, C/C++
- PostgreSQL, MySQL, SQLite, MongoDB, Redis
- Git, Unix, Jenkins, Rest/GraphQL APIs
- AWS (S3, EC2, CodeBuild, ECS, Secrets Manager, Lambda, EventBridge, Bedrock)

Experience

Backend Software Developer

March 2025 – Present

Alltrue.ai, Vancouver

- Owned backend architecture for AI safety/compliance feature deployed to clients worldwide
- Designed and built high-throughput, asynchronous processing pipelines using Redis queues to handle long-running evaluations without request timeouts
- Reduced job completion time by 50% and increased throughput capacity by 4x, through enabling horizontal scaling and concurrent evaluation of multiple client workloads
- Designed and implemented REST and GraphQL API endpoints, including schema design and validation (Pydantic), authentication, rate limiting, and comprehensive error handling
- Integrated vector embeddings and Hugging Face models into evaluation pipelines
- Deployed and operated services on AWS (ECS/Lambda, S3, EventBridge) with monitoring and alerting

Professional Esports Athlete (Team Captain)

August 2022 – March 2025

Multiple organizations: Evil Geniuses (Seattle), Nouns (remote), Team Canada

- Demonstrated leadership, ownership, and decision-making under sustained high-pressure environments

Software Developer

June 2018 – January 2023

Imagia Canexia Health, Vancouver

- Developed and maintained software used in computational systems worldwide for cancer diagnosis
- Enhanced bioinformatics pipelines by adding observability and performance optimizations, in addition to developing the portal web app to display assay results as easily viewable PDFs for doctors
- Reduced average pipeline execution time by 35% through profiling and optimization
- Implemented comprehensive logging and monitoring, reducing mean time to resolution
- Participated in full software development lifecycle, including design reviews, implementation, testing, deployment, and production support

Software Developer

May 2017 – December 2017

Shah Lab, BC Cancer Research Centre, Vancouver

- Developed event-driven pipelines to automate transfers and processing of terabytes of research data across servers and cloud storage
- Designed, implemented and released the alpha version of a custom data management platform with both GUI and API interfaces to orchestrate automated data pipelines, and other research tasks

Achievements: Contributing author to paper published in Cell

Research Assistant

May 2016 – July 2016

Pio lab, Simon Fraser University, Burnaby

- Identified, studied and deployed various approaches and software found in literature searches
- Wrote scripts in R and Python to automate virtual screening, downstream data parsing, and ranking

Achievements: Primary author to paper published in Nature's Scientific Reports and presented at 2016 CSCE

Education

Faculty of Science – Honours Biotechnology with Distinction

University of British Columbia, Vancouver