

# Ilia Alenabi

+1 (778) 708-2776 | @ialenabi@uwaterloo.ca | [in linkedin.com/in/ilia-alenabi/](https://www.linkedin.com/in/ilia-alenabi/) | [iliall.github.io](https://github.com/iliaall)

## EDUCATION

University of Waterloo

Honours **Computer Science**; **Artificial Intelligence** Specialization; **Statistics** Minor

Waterloo, Ontario

Sep 2022 – May 2027

## SKILLS

**Languages:** Python, Golang, C/C++, Java, SQL, Rust, JavaScript

**Frameworks/Libraries:** MySQL, Numpy, Pandas, PyTorch, Tensorflow, Django, Next.js

**Tools/Platforms:** Git, Docker, GBQ, AWS, Kubernetes, Redis, PostgreSQL, Pinecone, MongoDB

## EXPERIENCE

Cerebras

Toronto, ON

Machine Learning Engineer - Internship

Sep 2025 – Dec 2025

- Integrating **foundation models** into the Cerebras **inference** system with a focus on **performance optimization**

Huawei Canada

Toronto, ON

Compiler Engineer - Internship

Jan 2025 – Apr 2025

- Developed an **MLIR** pass to annotate attention layers with **sharding** metadata, optimizing **tensor distribution**
- Designed an **LLVM** pass for automated software cache creation, tuning memory usage in **distributed systems**
- Analyzed **Redis**'s performance, identified hotspots, and implemented **prefetching** to reduce runtime by **20%**

Cohere

Toronto, ON

Senior Data Quality Specialist - Part-time contract

Oct 2024 – Present

- Evaluated AI models' problem-solving skills, solving and correcting advanced **math** and **programming** questions

Questrade Financial Group.

Remote

Software Engineer - Internship

Sep 2024 – Dec 2024

- Automated **cloud-based MLOps** pipeline for **fine-tuning** in **Java**, reducing redundant AI inference costs by **8%**
- Integrated **NLP** solutions—fine-tuned on **1000+** support tickets—into **DevOps**, supporting **200+** developers
- Integrated **authentication checks** into internal pipeline, auditing **SQL** code from **200+** developers for security

Silverberry Group

Vancouver, BC

Data Scientist- Internship

Apr 2023 – Apr 2024

- Maintained **200+** hours of audio/video in **Pinecone** vector stores utilizing **OpenAI** Whisper and **Hugging Face**
- Implemented a **U-Net** for diabetic wound segmentation and a classifier in **PyTorch**, achieving **92%** accuracy
- Developed an AI-driven **interactive agent** environment to simulate application UI behavior pre-production

## RESEARCH

Vector Institute

Toronto, ON

Machine Learning Research Intern – **CompLING Lab**

Apr 2025 – Present

- Analyzed **vision-language models**' natural language understanding, identifying biases in **cross-modal** reasoning
- Contributed to **embedding extraction tool** for VLM models, adding support for models **Molmo** and **GLaMM**

Pingoo.AI

Remote

Researcher – **Building Trustworthy Generative AI for Diabetes Care**

Jan 2023 – Apr 2023

- Published in **Journal of Diabetes Science and Technology**, ranked in the **top 10%** of health sciences journals
- Reduced factual errors in AI output from **45%** to **1%** through **few-shot learning** and **prompt engineering**

## PROJECTS

UW Course Planner | [🔗](#) | [🔗](#)

- Developed a course schedule tool using **Django/Next.js** and integrated **OpenSSL** to secure user authentication

PQTree library | [🔗](#)

- Optimized SageMath's **PQTree** using **Rust** with multi-threading, increasing performance by **200%** in benchmarks

UW Course Compass | [🔗](#)

- Built a course recommendation engine in **GoLang**, improving course selection speed and efficiency for students