

Akemi Izuko

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EDUCATION

University of Alberta

MSc. Thesis, Computing Sciences

Courses: ML and Practical Privacy, Robust and Trustworthy ML

Edmonton, Canada

Sept. 2024 – April 2026

University of Alberta

BSc. First Class Honors Computing Sciences, Minor in Mathematics

Courses: Compiler Design, Mobile Robotics, Practical Algorithmics, Parallel and Distributed Systems

Major GPA: 3.95/4.0

Edmonton, Canada

Sept. 2020 – April 2024

EXPERIENCE

Junior Developer

Monark

- Developed React frontend, Express backend, and React-native mobile apps
- Improved mobile Maestro testing pipeline

March 2024 – Aug. 2024

Calgary, AB

Machine Learning Intern

Monark

- Trained large language models, on Google Cloud, to facilitate role play for leadership training
- Built a json-driven REST-API frontend to automate conversation testing and data collection

Dec. 2023 – March 2024

Calgary, AB

Data Governance Intern

Servus Credit Union

- Cleaned up customer address and account records in an on-premise data warehouse, using Pandas and SQL Server
- Used Azure DevOps to facilitate an agile scrum methodology, with daily standups

May 2023 – August 2023

Edmonton, AB

Teaching Assistant

University of Alberta

- Lead the Development of new C programming exercises for an undergraduate CS course
- Helped students understand pointer arithmetic and intermediate data structures in weekly 3 hour sessions

Sept. 2022 – Present

Edmonton, AB

PROJECTS

Real Time Content Moderation | *Sockets, RPC, PyTorch, PyAudio, Ollama*

Jan. 2024

- Built a real-time moderation tool for Discord calls in a 24h hackathon using LLMs
- Placed 2nd out of 171 participating teams at Hacked 2024

Gazprea Compiler | *C++, LLVM, MLIR, Woodpecker CI*

Sept. 2023 – Dec. 2023

- Built a complete compiler to emit and lower LLVM from a custom ANTLR4-generated frontend
- Personal contributions include designing most the frontend, maintaining the CI, and leading the PR reviews

Identifying Mange in Coyotes | *Pytorch Lightning, DVC, Github Actions*

Jan. 2023 – April 2023

- Worked with the biology department and local city administrators to collect over 60,000 camera trap images
- Co-authored a paper detailing our findings and results

EXTRACURRICULAR

Autonomous Robotic Vehicle Project | *Docker, PyTorch, DigitalOcean, ROS 2*

Jan. 2023 – Present

- Automated services with systemd and containerized each with docker
- Setup a network of reverse proxies, load balancers, and authentication gateways

Undergraduate Artificial Intelligence Society | *Numpy, Pandas*

May 2022 – May 2023

- Hosted introductory workshops in Numpy and Pandas for undergraduate students
- Co-lead the Hex board game bot competition for undergraduate students

TECHNICAL SKILLS

Languages: Python, Rust, Typescript, C/C++, SQL Server

Developer Tools: Git, Docker, Systemd, Github Actions, DigitalOcean, Linux, Neovim

Libraries: React, PyTorch Lightning, Tokio, Numpy, Svelte.js, Pandas