

ALI AZIMI

+1 (587) 778-1100 ◇ Edmonton, AB

sazimi@ualberta.ca ◇ [linkedin.com/in/seyedalirezaazimi/](https://www.linkedin.com/in/seyedalirezaazimi/) ◇ github.com/azimi99 ◇ azimi99.github.io

CORE COMPETENCIES

- Applied knowledge of ROS, MuJoCo, and sim-to-real transfer techniques through academic research
- Practical experience with deep learning frameworks, including PyTorch, JAX, and TensorFlow through research and projects
- Experienced in performance optimization using CUDA and Just in Time compilation techniques through academic research and projects
- Proficient in statistical modeling, optimization, and data analysis using NumPy, SciPy, and Pandas through research, graduate coursework, and projects

TECHNICAL SKILLS

Programming Languages	Python, C++, C, C#, JavaScript, Rust, Java, LaTeX
Libraries	PyTorch, JAX, TensorFlow, React, Node.js, Pandas, NumPy, CUDA, Wandb
Databases	MySQL, SQLite, MongoDB

PROJECTS

PPO in JAX July 2025 – Present

<https://github.com/azimi99/PPO-JAX>

- Deep reinforcement learning algorithm developed using Python, Numpy, and JAX
- Performance optimized for fast training using JIT
- Benchmarked performance across compatible Gym environments
- Created benchmark report using wandb

PandaPickCube May 2025 – July 2025

<https://azimi99.github.io/about.html#talks>

- End-to-end neural network that performs object picking from vision using the Franka Emika Panda arm
- Trained in a simulator using domain randomization
- Utilizes OpenCV to capture real-time images and perform inference
- Trained using JAX and CUDA for accelerated performance

EXPERIENCE

Research Assistant Sep 2023 – Present

Department of Computing Science, University of Alberta, Edmonton AB

- Designed and implemented Deep RL algorithms in JAX and PyTorch to perform end-to-end policy training
- Optimized training performance through Just In Time compilation and CUDA
- Improved sim-to-real transfer of models using domain randomization
- Built simulation environments in MuJoCo and Genesis for robotic manipulation to enable safe and fast prototyping and sim-to-real transfer, speeding up learning by 99%

Software Engineer May 2022 – Aug 2023

Intelliwave Technologies, Edmonton AB

- Developed comprehensive test suites in .NET and JavaScript for robust frontend and backend testing

- Automated UI testing with Mocha and Node.js; built monitoring dashboards in React for production health
- Created scalable MongoDB and MySQL queries for search, internal analytics, and reporting
- Implemented system integration scripts to streamline cross-system communication and operations

Software Engineer Intern (Co-op)

Sept 2021 – Dec 2021

Intelliwave Technologies, Edmonton AB

- Developed comprehensive test suites in .NET and JavaScript for robust frontend and backend testing
- Automated UI testing with Mocha and Node.js
- built monitoring dashboards in React for production health

Software Engineer Intern (Co-op)

Jan 2020 – Aug 2020

Telus, Edmonton AB

- Developed Python test scripts to automate TV application validations
- Built an inventory management system using JavaScript, MongoDB, and native mobile apps (Swift/Java)
- Contributed to quality assurance through manual acceptance and smoke testing

Database Administrator Intern (Co-op)

May 2019 – Aug 2019

University of Alberta, Edmonton AB

- Maintained Ubuntu servers and managed internal research databases
- Wrote search queries in MySQL to retrieve data for web APIs
- Cleaned, remapped, and transformed datasets using Python to insert into relational databases
- Developed and maintained a website containing oil and gas data using Wikimedia

EDUCATION

M Sc. in Computing Science, University of Alberta

Expected 2026

Specialization in Machine Learning

B Sc. in Computer Engineering (Co-op), University of Alberta

2017 – 2022

With Distinction

AWARDS

Alberta Graduate Excellence Scholarship, \$12,000

2024

Awarded for academic excellence and research distinction

Graduate Research Stipend, \$50,000

2023

Awarded for ML research in robotics and vision;