

Yazan Masoud

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EDUCATION

University of Waterloo

Bachelor of Computer Science

- Honors & Affiliations: Dean's List, ColorStack Fellow

May 2026

GPA: 3.9/4.0

EXPERIENCE

CentML

May 2024 – Present

Software Engineer Intern

Toronto, ON

- Created a system to predict inference execution time of arbitrary ML models on different GPU instances using **PyTorch** to optimize deployment selection, accurate within 10%.
- Built a **PyTorch** backend to split torch compute graphs across multiple GPUs to reduce model deployment costs.
- Enabled dynamically shaped tensor support in **Python** for remote compilation with Hidet deep learning compiler.

Extend Enterprises Inc.

January 2024 – April 2024

Software Engineer Intern

New York, NY

- Migrated account management portal to new **Go** backend and **Postgres** read replica, cutting load times by 10x.
- Developed an enterprise admin app in **React** to support new client, enabling \$1.1 million in charge volume.
- Integrated new MasterCard BINs into TSYS payment processor in **Kotlin** to onboard 3000+ new users.

Bearworks

May 2023 – September 2023

Software Engineer Intern

New York, NY

- Launched a sales platform leveraging **React**, **Next.js**, **Python**, **Postgres**, & **AWS** piloted by 4 companies.
- Built a zero-shot voicemail system to auto-generate & synthesize tailored messages, increasing call volume by 30%.
- Implemented a real-time transcription system using WebSockets with **OpenAI Whisper** for 1000+ daily calls.

Infinera

September 2022 – December 2022

Software Engineer Intern

Ottawa, ON

- Developed a **gRPC** API suite in **C++** enabling developers to configure digital subcarriers in test.
- Instrumented SDK with GPerfTools and pprof for chip memory/CPU profiling across 4 codebases.

Thomson Reuters

January 2022 – April 2022

Software Engineer Intern

Toronto, ON

- Generated/captured distributed traces using OpenTelemetry to monitor the health of large-scale microservices.
- Implemented RESTful API in **C#** for secure data exchange between Legal Tracker and external financial services.

PROJECTS & ACTIVITIES

smartARM | Python, SciPy

[Website Link](#)

- Progressed AI-powered prosthetic arm startup from concept to functional prototype showcased by Microsoft for Global Accessibility Awareness Day 2023.
- Architected a controls system in **Python** to process EMG signals leveraging FFTs & high/low-pass filters.

Brain Wave Gaming & Speech | Python, OpenAI, SciPy, Multithreading

[GitHub Link](#)

- Built an EEG Brain-Computer Interface on to play Flappy Bird using **Python** and custom circuitry.
- Implemented techniques from research paper by Masaki Nakanishi to enable verbal communication through steady-state visually evoked potentials and OpenAI's text completion API.

Naruto Hand Sign Classifier | Python, OpenCV, TensorFlow, Keras

[GitHub Link](#)

- Led design of transfer learning computer vision pipeline for real-time hand gesture classification built on VGG16 leveraging **OpenCV** to curate dataset, localize/crop hand positions, and make inferences.

SKILLS

Languages: Python, TypeScript, JavaScript, C++, C, Go, Kotlin, C#, HTML, CSS, SQL

Technologies: React, Angular, PyTorch, Next.js, Node.js, CUDA, Git, AWS, Docker, Kubernetes, Linux, PostgreSQL

Concepts: Data Structures & Algorithms, Full-Stack Development, Back-End Development, Machine Learning, Parallel Programming, Distributed Systems, Databases, REST APIs, Unit Testing, Version Control, CI/CD,