

Yazan Masoud

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EDUCATION

University of Waterloo

Bachelor of Computer Science

April 2026

Waterloo, ON

- GPA: 3.87/4.00, Dean's Honours List 2022, 2023
- Relevant Coursework: Data Structures & Algorithms, Object-Oriented Programming, Computer Architecture

EXPERIENCE

Software Development Intern

CentML

May 2024 – Present

Toronto, ON

- Built a PyTorch backend to support model/pipeline parallelism on TorchDynamo graphs for reducing GPU costs
- Building performance prediction pipeline for PyTorch models through CUDA Graph analysis to select optimal GPU deployment

Software Engineer Intern

Extend Enterprises Inc.

Jan 2024 – Apr 2024

New York, NY

- Rebuilt sales/customer support portal with new Go backend and Postgres read replica, cutting load times by 10x
- Enabled \$1.1 million in charge volume by migrating enterprise admin app from Elm to React
- Integrated new MasterCard BINs into TSYS payment processor in Kotlin backend to onboard 3000+ new users

Software Engineer Intern

Bearworks

May 2023 – Sept 2023

New York, NY

- Launched Bearworks from inception leveraging React, Next.js, FastAPI, Postgres, & AWS to support 4 pilots
- Built a zero-shot voicemail system to auto-generate & synthesize tailored messages, improving call volume by 30%
- Enabled 1000+ daily calls to have real-time transcriptions through WebSockets with OpenAI's Whisper

Software Development Engineer Intern

Infinera Corporation

Sept 2022 – Dec 2022

Ottawa, ON

- Built a gRPC API suite in C++ enabling developers to configure digital subcarriers in test 300% faster
- Instrumented ASIC SDK with GPerfTools and pprof for chip memory/CPU profiling across 4 codebases
- Streamlined integration of 4 microservices using Bash scripts to bridge Docker containers with a custom MCU

PROJECTS

smartARM | Python, C++, Azure AI

[Website Link](#) | Mar 2023 – Aug 2023

- Worked with founders to enable an AI-powered prosthetic arm startup to progress from concept to functional prototype by architecting a control system using Python to process EMG signals

Brain Wave Gaming & Speech | Python, OpenAI, SciPy, Multithreading [GitHub Link](#) | Jan 2023 – Feb 2023

- Built an EEG Brain-Computer Interface to play Flappy Bird and enable verbal communication, using custom circuitry, digital filtering, 8-32Hz brain wave processing on Raspberry Pi, and OpenAI's text completion API

Naruto Hand Sign Classifier | Python, OpenCV, TensorFlow, Keras [GitHub Link](#) | Mar 2022 – June 2022

- Led design of computer vision pipeline for real-time hand gesture classification built on VGG16, achieving 93.60% test accuracy by leveraging OpenCV to curate dataset, localize/crop hand positions, and make predictions

SKILLS

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

Frameworks and Libraries: React, FastAPI, Next.js, Node.js, PyTorch, Arrow, .NET, CUDA

Tools: Git, Agile, AWS, Docker, JIRA, Jenkins, Kubernetes, Redis, Linux, MongoDB, PostgreSQL

Concepts: Full-Stack Development, Back-End Development, Agile Methodologies, Machine Learning, Parallel

Programming, Web Frameworks, System Design, Distributed Systems, REST API, Unit Testing, Version Control, CI/CD