AMJAD YAGHI

(647) 568-9066 | meej.ca | amjadclnyaghi@gmail.com | LinkedIn | GitHub

EDUCATION

University of British Columbia — Vancouver
Bachelor of Applied Science, Engineering Physics (Co-Op) — Expected May 2027

- Relevant coursework: Data Structures, Algorithms, Machine Learning, Linear Algebra, Signals and Systems

EXPERIENCE

Generative Models.ai — Toronto
Software Engineer Intern — May 2025 – Aug. 2025

- Built a Django content API with multi-provider LLMs, Temporal workflows, and live progress for large content runs
- Shipped a content analysis engine with SEO and AEO scores, readability checks, and scraped competitor reviews
- Set up auth and billing with Clerk and Stripe, adding webhooks, plan changes, refunds, and secure payment flows
- Launched a Next.js editor with real-time co-edit, AI checks, SEO tips, and web analytics via Liveblocks and TipTap

Medical EdTech Startup — Toronto
Full Stack Developer — Apr. 2025 – Present

- Built an exam simulator in React and TypeScript with Tailwind for OSCE prep, driving realistic clinical drills
- Integrated Gemini for AI patient replies and semantic scoring to grade answers, boosting realism and grading quality
- Managed app state with React Context, custom hooks, and strict TypeScript types to keep flows fast, safe, and clear
- Shipped an accessible UI with shadcn/ui, adding text-to-speech, timers, quizzes, and full keyboard navigation

UBC Rocket — Vancouver
Software Engineer Intern — Sep. 2022 – Aug. 2023

- Built a Python control system for a tPA clot study, driving actuators and valves in a 3U+ CubeSat flown to 30,000 ft
- Made a PyQt GUI to run actuators, plot live sensor data, and watch limit switches via Arduino, boosting safety
- Delivered a multithreaded telemetry path with asyncio and serial I/O, giving stable sensor feeds and reliable logging

PROJECTS

Projection-Mapped Interactive String | *Python, Processing, OpenCV*

- Built an interactive guitar projection in Processing; users play with their shadow on strings mapped to a screen
- Used OpenCV contour detection in real time to trigger string sounds and draw synced visual effects with low lag

Multitasking Simulation Agent | *Python, Gazebo, OpenCV, TensorFlow*

- Built a Gazebo agent that drives off road and reads signs while staying safe, using ROS nodes to split tasks cleanly
- Tuned PID to follow lane marks and track moving targets in real time, keeping the robot steady on rough terrain
- Used OpenCV and a TensorFlow CNN to detect people and read symbols, hitting over 90% accuracy on blur and rotation

Autonomous Mario Kart Robot | *Arduino, STM32, Bluepill*

- Wrote an Arduino tracker that uses simple convolution to lock onto an IR beacon and localize the kart on track
- Built a sonar-triggered coin claw in C++, enabling precise autonomous grabs and opening the race shortcut each lap
- Added buck converters to steady power and keep motors strong under changing loads during test laps and timed runs

SKILLS & INTERESTS

Languages & Web: Python, TS/JS, C/C++, SQL, React, Next.js, Tailwind, shadcn/ui, TipTap, OpenCV, MATLAB
Backend, AI & Systems: Django, Docker, Postgres, Redis, Temporal, AI APIs, Stripe, Arduino/STM32, CI/CD
Interests: calisthenics, snowboarding, guitar, the mechanics of good sleep