

Bruce Wang

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Education

University of Waterloo

GPA: 3.9

Bachelor of Computer Science, Co-op

Sept 2024 – May 2028

- Courses: Data Structures & Algorithms, Compilers, Object-Oriented Programming, Computer Architecture

Experience

Mercor

San Francisco, CA

Software Engineer Intern

Sept 2025 – Apr 2026

- Architected agentic, rubric, and deterministic **RL** verifiers tracking row-level database and filesystem mutations, used in **20+** environments and shipped to **Anthropic** for frontier model training (Mythos, Opus 4.7, Sonnet 4.6)
- Implemented an AutoQC pipeline on **Modal** to catch reward hacking, false-positives, and misconfigured environments **before** delivery, reducing delivery error rates by **89%** across **\$20M+** worth of projects
- Built an agent harness with computer, browser, bash and code MCP tools, serving **100,000+** eval runs
- Engineered a multi-container session orchestrator with AWS ECS, Terraform, and an OpenResty reverse proxy (Nginx + Lua) for dynamic session routing, supporting **10,000+** parallel sandboxed CUA eval runs
- Built data annotation platform with live agent observability and environment interaction, cutting AHT by **65%**

Plato Technologies

San Francisco, CA

Software Engineer Intern

May 2025 – Aug 2025

- Architected a synthetic task generation pipeline for browser-agent RL environments using AI agents, cutting task creation AHT by **4x** and covering **80%** of documented workflows at a **91%** human-QC pass rate
- Generated and benchmarked **2000+** tasks for **20+** environments, helping train Amazon AGI's Nova Act agent
- Engineered **Firecracker** microVM tooling to snapshot and restore environment states for reproducible agent runs
- Deployed **10+** browser-agent RL training environments using **Docker**, **AWS ECS**, **Terraform**, and **Nginx**

Hppn.ing

Waterloo, ON

Software Engineer Intern

Sept 2024 – Dec 2024

- Expanded user base by **2,000+ MAU** and developed core product features with **React Native**, **Expo** and **FastAPI**
- Built semantic search for **100,000+** events, embedding user queries as 256-dimensional vectors and retrieving them via a **FAISS IVF (ANN)** index, cutting irrelevant results by **67%**
- Built a map view with marker clustering (Google Maps, Redis) to visualize high-density event locations across cities

Projects

🔗 Pianofi – Audio to Sheet Music Transformer | Python, PyTorch, Next.js, FastAPI, Supabase, Docker, AWS

- Shipped pianofi.ca 🌐 with **1000+ users**, an AI platform that enables users to convert songs into piano sheet music
- Distributed audio-to-MIDI model inference across auto-scaling workers with a **Redis** queue
- Created a pipeline converting MIDI into MusicXML, rendered as interactive sheet music in **Next.js** frontend
- Automated CI/CD for 3 microservices using **Docker**, **AWS**, and **GitHub Actions** with zero-downtime deployments

🔗 WatClub – Full-Stack Club Review App | React, JavaScript, Django, SQLite, Git, Playwright

- Won **1st** out of **100+** teams in UWaterloo Hackathon for developing a club review platform for UWaterloo students
- Built a search engine using the **TF-IDF** algorithm and n-grams to enable fuzzy search, with query times under **1s**
- Designed a **Django** backend with JWT auth handling club discovery, reviews, commenting and tag-based filtering
- Periodically web scraped **5+** websites using **Playwright** and **BeautifulSoup** and stored structured data in SQLite

Technical Skills

Languages: Python, TypeScript, JavaScript, C, C++, SQL, Bash, Lua, Java, HTML, CSS, Racket

Frameworks: React, Next.js, Express, Node.js, React Native, FastAPI, Flask, Django, Pandas, Tailwind

Technologies: Git, Docker, AWS, GCP, Terraform, Linux, PostgreSQL, MySQL, Redis, Nginx, Kubernetes