

Neil Zhang

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Hi Chris and Oana,

I'm a Computing and Financial Management student at Waterloo, and I'd love to join the Wygo team this winter! I came across the posting and thought it was really cool how your team's trying to bring communities together with software.

I've actually been on the organizing side of things myself! I helped lead a large local hackathon in my hometown of Milton and also helped put together a community Lunar New Year show. Both experiences showed me how much work goes into bringing people together. Which is why I'd love to join Wygo and make it easier for people like me to host even better hackathons (and more).

Moving away from my event-hosting skills to my engineering side, I spent last summer at CPP Investments working on a small team where I was trusted to tackle production issues affecting multiple teams. Having that level of responsibility pushed me to become a much stronger engineer especially when it came to figuring things out independently and solving problems I hadn't encountered before. I really enjoyed that experience, and I'd love to have that same kind of ownership at Wygo.

Outside of work, I love playing around with interesting tech, and my latest fascination is extended reality. I'm currently working on an open-source XR headset at Waterloo Reality Labs, where I've gotten to work on both the Linux-based software and hardware setup. I'm also really into game design and enjoy making little retro games on the side.

I'd love to chat more about what you're building and learn more Wygo! Thanks for considering my application!

Best regards,

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EDUCATION

University of Waterloo

2025 – Present

Bachelor of Computing & Financial Management (Honours, Co-op)

GPA: 85%

- Dual Major: Computer Science & Finance
- Relevant Coursework: Algorithm Design, Object-Oriented Programming, Functional Programming
- Teaching Assistant: CFM 101 / AFM 127 – Financial Analytics and Data Analytics

EXPERIENCE

CPP Investments

May 2026 – Aug 2026

Software Engineer Intern

Toronto, ON

- Engineered a full-stack analytics platform integrating Jira APIs, enterprise systems, and survey data to automate KPI calculations, eliminating 3+ hours of weekly recurring spreadsheet work for managers.
- Built an agentic developer tool to generate Airflow pipeline configurations from natural-language requirements, using MCP servers to retrieve repository-specific schemas and validate generated config against repo schemas.
- Reduced observability dashboard latency by 70% and eliminated peak-load log loss by introducing S3-backed buffering between CloudWatch and Elasticsearch, decoupling log collection from indexing.
- Accelerated AWS Glue data quality checks by 15% by refactoring recursive processing of user-defined dataset rules and optimizing complex queries to resolve stack overflows, memory pressure, and production timeouts.

University of Waterloo Reality Labs

Dec 2025 – Present

Student Software Developer

Waterloo, ON

- Developed applications and interaction systems for a standalone XR headset using Godot and OpenXR, integrating hand tracking, controller input, and backend services to support interactive 3D interfaces.
- Designed a low-latency 3D window manager for 20+ concurrent application surfaces with full lifecycle handling.
- Eliminated blank-screen rendering stalls during live window resizing by decoupling size changes from render resolution updates, reducing unnecessary texture reallocations while maintaining responsive XR interactions.
- Worked on Linux-based XR headset hardware bring-up by installing and configuring device drivers.

CyberWolfe

Jun 2024 – Aug 2024

Security Engineering Intern

Oakville, ON

- Performed vulnerability assessments and penetration testing across 50+ client web environments using web security and Linux-based tools, identifying 100+ authentication flaws, misconfigurations, and backend vulnerabilities.
- Built a reporting tool to parse and consolidate scan results and automatically generate standardized reports.
- Developed scripts to automate repetitive security checks across client environments, reducing manual testing steps and improving consistency across assessments.

PROJECTS

Extended Reality Headset Launcher | *Godot, OpenXR, Linux*

- Open-source XR desktop environment for a standalone Linux-based VR headset, designed toward enabling users to develop, launch, and interact with VR applications entirely from within the headset.
- Current prototype provides an application launcher, interactive shell terminal, virtual keyboard, and floating 2D applications rendered on 3D surfaces with OpenXR-based controller and hand interaction.

ODTE Options Trading Simulator | *TypeScript, JavaScript, PostgreSQL (Supabase)*

- Built an options trading game featuring simulated market scenarios and real-time P&L tracking.
- Implemented interactive trading state management and persistent leader-boards using PostgreSQL backend.

Relay – Agentic Coding Workbench | *TypeScript, Node.js, WebSockets, Docker*

- Building a cloud-hosted platform for remotely executing AI coding agents in persistent development environments, supporting code editing, shell commands, and automated tests.
- Implementing persistent agent sessions using WebSockets and Docker to support asynchronous code execution.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, C, Python, SQL, Bash

Technologies: AWS, Node.js, React, PostgreSQL, Supabase, Git, Linux, Docker, Godot, OpenXR

Other: Full-stack Development, Databases, Infrastructure, CI/CD, Developer Tooling, Interactive UI