

NASH WEISSBERG

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EXPERIENCE

Voxelis AI

May 2026 - Aug 2026

Software Engineer

Vancouver, BC

- Built a C++17 trajectory-planning engine that generates physically feasible training data for airborne helicopter tracking by combining A* and a time-layered DAG planner.
- Replaced chartered-flights for data collection by building a step-locked Isaac Sim + Cesium SIL for repeatable development and testing of VoxVision perception and ML algorithms.
- Reduced missed mapping opportunities by building a C++17 telemetry-driven condition engine for autonomous camera capture.

Vireo Interfaces

Sept 2025 - Dec 2025

VR Peripherals Engineer

Kitchener, ON

- Accelerated multi-week data collection to 1 day by building a self-labeling Python-based ROS pipeline using sigmoid motion interpolation to generate 3,000+ labeled frames/min.
- Met strict Flash and SRAM limits on stylus sensor module by developing bare-metal CMSIS firmware for USB-CDC, I2C, and EXTI sensor interfaces.

Waterloo Rocketry

Apr 2025 - Sept 2026

Embedded Firmware Developer

Waterloo, ON

- Repurposed PIC18 flight boards for health checks, ADC acquisition, and CAN telemetry.
- Avoided board respin by diagnosing pinout faults using an oscilloscope and manual probing.

Ontario Ministry of Transportation

Jan 2025 - Apr 2025

Junior Technical Analyst

Toronto, ON

PROJECTS

GenomeKit | github.com/deepgenomics/GenomeKit

2025

- Fixed UTR misclassification in C++ GFF3 parser by deferring 5'/3' assignment until full-transcript CDS bounds are known, unblocking GENCODE v47lift37 imports.
- Developed [CI workflow](#) to build wheels for Python 3.9–3.12 by statically linking native dependencies to bypass PEP 517/518 issues for easy installation across platforms.

FPV Plane | github.com/fpv-chicken-nugget/nrf-rc-link

2025

- Built a custom NRF24L01 radio protocol with packet sequencing, auto-ACK handling, telemetry, and link-loss detection.
- Implemented STM32-based RC control and telemetry system for an FPV fixed-wing aircraft.

EDUCATION

University of Waterloo | *Computer Engineering*

Sept 2024 - May 2029

SKILLS

Languages C++, C, Python, Bash

Technologies ROS 2, Isaac Sim, Protocol Buffers, MQTT, STM32, CAN

Systems Linux, CMake, Docker, Git, GitHub Actions, AWS