

Liam Wong

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EDUCATION

University of Waterloo

Bachelor of Applied Science in Nanotechnology Engineering

Waterloo, ON

Sept. 2025 – June. 2030

TECHNICAL SKILLS

Engineering & Technical: Design & Tool Building, Python, React, Arduino Prototyping, Raspberry Pi, FPGA, Solidworks, FEA, Matlab, Excel, Word, and Teams, 3D printing, Mig & Tig welding, Metal Forging, Wood Working

Entrepreneurship & Creative: Small business operations, vendor management, customer service, marketing, Photography/Videography, content creation, video editing (DaVinci Resolve), and business growth

Leadership & Teamwork: Training facilitation, logistics coordination, mentoring diverse groups, strong verbal and written communication skills, problem solving, attention to detail, and work well within teams as well as independently

EXPERIENCE

Design & Product Development Engineer

Apr. 2026 - Sept. 2026

Infinitude Design Canada

Toronto, ON

- Led **end-to-end** development of custom **structural** installations, translating client concepts into manufacturable designs that were successfully deployed across **25+** large-scale events
- Reduced manufacturing **ambiguity** by developing detailed design models that balanced aesthetic intent, structural integrity, safety requirements, cost, and fabrication constraints across cross-functional teams
- **Streamlined** fabrication and installation workflows by optimizing internal material management systems and improving accessibility of high-use tools and components
- Prevented installation delays during high-profile events by rapidly **diagnosing** and resolving on-site engineering challenges, keeping **fast paced** project timelines **on track**

Founder & Business Owner

June 2020 – Aug 2023

Self—Employed

Markham, ON

- Founded and operated a small business designing and hand-pouring custom art pieces made of silver and copper, generating **\$10,000+** in revenue
- Coordinated **vendor supply** and showcased products at the *Chicago One of a Kind Show*
- Managed end-to-end operations, including **production, sales, customer satisfaction** through timely service and high-quality products, and financial tracking with **Excel**
- Designed and built custom workshop tools to run day-to-day operations, continuously aiming to improve and refine my craftsmanship techniques and product quality
- Expanded brand reach through **social media marketing** and live streaming on Instagram, driving client engagement and drawing potential new clientele

PROJECTS

Robot Arm | Computer Vision + Robotic Arm ("Right Arm")

Feb 2026 – Present

- Implemented a real-time **vision control system** using OpenCV and MediaPipe to track hand landmarks, mapping 2D image coordinates to robotic arm utilizing **inverse kinematics** for intuitive gesture-based control
- Integrated **embedded systems** (Arduino, motor drivers, sensors) to control actuators and process feedback signals, iteratively prototyping and testing multiple design configurations to optimize performance, accuracy, and stability
- Debugged **cross-domain** issues spanning hardware, firmware, and software layers in a team-based dev-environment

Lubble - App Development | Personal Tracker/Organizer/Optimizer

May 2026 – Present

- Applying **UI/UX design** principles through user-centered research, creating wireframing, and iterative interface design to improve usability
- Working **end-to-end** development by defining requirements, planning features, prototyping solutions, and continuously refining the product as both a technical and personal learning project

Project WellNest | United Nations Habitat Hackathon

Oct 2025

- Placed 2nd overall at the **UN-Habitat Hackathon 2025**, developing **WellNest**, an AI-driven healthcare kiosk aimed at improving access to basic **medical services** for unhoused communities in Kitchener-Waterloo