

# Connor Sequeira

647-802-2321 · sequeira.connor@gmail.com · [connorsequeira.com](http://connorsequeira.com)

---

## KEY COMPETENCIES

Robot Programming • C++ • Python • 3D Vision • SolidWorks • Machine Learning • ROS2 • PLC Systems • FEA

---

## PROFESSIONAL EXPERIENCE

### Robotics and Automation Intern

May 2025 - Aug 2025

A Berger Precision

Installed and programmed a FANUC CRX-5iA robot for an AI-powered inspection cell, including integration with safety systems.

Constructed logic for Mech-Mind 3D camera system and integrated machine learning algorithms to enhance functionality, resulting in a 60% reduction in part mispicks during operation.

Contributed to the development, training, and optimization of an AI-based inspection system, capable of detecting surface defects as small as 50 microns.

### Engineering Analyst

Sep 2024 - Dec 2024

A Berger Precision

Developed and debugged program for UR5e in pick-and place application, optimizing cycle time from 21.3s to 6.7s.

Designed 3D models in SolidWorks, applied FEA, and prototyped via 3D printing, improving tool life and cutting downtime by 87%.

Developed PLC logic for palletizing and vision inspection, optimizing sensors, switches, and parameters to cut faults by 95%; created base code and flowcharts for future AI integration.

### Engineering Assistant

Jan 2024 - Apr 2024

Armacell Canada

Designed printer mount using SolidWorks for product traceability that meets operating and safety demands

Created cost/benefit analysis, risk assessment, and project report using calculated and gathered data to propose solution to leaking blender machines

---

## PROJECTS

### PrecisionMOTION

Functioning replica hand that mimics user inputs.

[Learn More](#)

### AUTOlathe

Model lathe designed to carve user drawn profiles.

[Learn More](#)

### TRON Haptics

Wearable glove that dynamical adjusts resistance to simulate touch sensations.

---

## EDUCATION

### BaSC Mechatronics Engineering

University of Waterloo, expected in 2028