

# Lucas Arzoumanian

613-246-8222 | [larzouma@uwaterloo.ca](mailto:larzouma@uwaterloo.ca) | [linkedin/lucas-arzoumanian](https://www.linkedin.com/in/lucas-arzoumanian)

Eligible to work in: Canada, USA, EU

Languages: English, French, Polish

## WORK EXPERIENCE

### ACRYLIC ROBOTICS | ROBOTICS ENGINEERING INTERN

Montreal, QC | May 2021 - Aug 2021

- Led team of fellow robotic interns to design and build the prototype
- Configured ROS as the control software on a Raspberry pi using Ubuntu
- Designed parts and assembly in SolidWorks (3D printing)
- Designed and implemented electrical and embedded systems (Schematics done in Altium)
- Scoped out the hardware and materials needed to construct the prototype (ex: motors, micro-controllers, cameras)

### TOPHAT ROBOTICS | ROBOTICS ENGINEERING INTERN

Waterloo, ON | Sept 2020 - Dec 2020

- Spearheaded assembly of entire electromechanical system including soldering, wiring, cutting and assembling metallic frame and polycarbonate paneling
- Created wiring schematics for robot using KiCAD and designed optimal testing conditions to test robot functionality
- Worked with an Nvidia jetson using Python to control the robot

### COMPENDIUM GROUP | ENGINEERING INTERN

Prescott, ON | Jan 2020 - Apr 2020

- Performed turnkey engineering services from assessment of customer needs to conception, design specification, production, assembly, testing, and quality checks to ensure standards are met
- Power and hand tool operation and finishing in the machine shop
- Utilized SolidCAM in SolidWorks (GD&T) following design to generate G-code for CNC machining (FANUC Series Oi, Haas Automation 5-axis)

## EDUCATION

### University of Waterloo - BSc. Honours Mechatronics Engineering

Waterloo, ON | Jun 2024

CUMULATIVE GPA: 3.86/4.00

**Coursework:** Microprocessors and Digital Logic; Data Structures and Algorithms; Circuits; Digital Computation

**Scholarships:** Paul Koenderman Engineering Scholarship, Presidential Scholarship of Distinction, Thousand Island Engineering Chapter Scholarship, Governor General Award, Rotary Club Scholarship, Professional Engineers of Ontario Scholarship, Schulich Leader Nominee, Shell Oil Corporate Scholarship

## TEAM PROJECTS

### UNIVERSITY OF WATERLOO MARS ROVER DESIGN TEAM

MECHANICAL DESIGNER

- Designed, manufactured, and installed parts on Mars Rover using SolidWorks
- Collaborated with electrical and software subteams to optimize performance and integration leveraging MATLAB to simulate test scenarios

### ACADÉMIE CATHOLIQUE ANGE-GABRIEL ROBOTICS TEAM

TEAM FOUNDER/CAPTAIN

- Implemented design that led to winning 1st place at Provincial Robotics and Control Systems Competition, Skills Ontario
- Effectively applied the use of various sensors (photosensitive, ultrasonic, magnetic) and motors/servos
- Designed and optimized robot for precision-based tasks using Labview for programming systems

## SKILLS

**Hands-on:** Practical CNC machining, 3D printing, Machine shop

**Design Software:** SolidCAM, SolidWorks, KiCAD, Labview, AutoCAD, Altium

**Programming:** C++, Python, HTML, CSS, MATLAB

**Interests:** Flying, Shotokan karate black belt, classical guitar level 8 RCM, stand-up comedy