Lucas Arzoumanian

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Eligible to work in: Canada, USA, EU
Languages: English, French, Polish

WORK EXPERIENCE

ACRYLIC ROBOTICS | Robotics Engineering Intern   Montreal, QC | May 2021 - Aug 2021
- Dynamic start-up environment where I led a 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, as well as the drawings, 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 0i, Haas Automation 5-axis)

EDUCATION

University of Waterloo - BASc. 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