Christina Pizzonia

647-740-6134 • Email • LinkedIn • GitHub • Portfolio

EXPERIENCE

Summer Research Student May 2022 - Aug 2022
Passeport Lab *Toronto, ON*

- Processed stormwater samples via density separation and organic digestion (in accordance with lab SOPs) and identified microplastics via FTIR spectroscopy to provide data for publication
- Analyzed microplastic content data in Microsoft Excel to determine sources of error & improve accuracy of counted samples by 50%
- Performed a literature review (15 papers) on organic contaminant extraction methods and presented my findings to 2 lab teams at the university.

Research Assistant May 2021 - Nov 2021
SickKids Hospital *Toronto, ON*

- Created and presented figures using BioRender to illustrate the mechanisms behind current advances in cancer immunotherapy to incoming undergraduates

Tutor Mar 2021 - Present
Self-Employed *Toronto, ON*

- Have improved student scores by 25% in calculus, advanced functions and chemistry

PROJECTS

Space Invaders: Worked with a partner to implement the retro arcade game Space Invaders in Verilog; design tested on a DE1-SoC FPGA connected to an external monitor with a VGA adapter.

Autonomous Robot [GitHub]: Designed and programmed an autonomous, line-following robot using Fusion360 and Arduinos to navigate a track using a bang-bang control algorithm.

Sauna Redesign [Slides]: Designed a fully off-grid sauna in Rhino/Photoshop for Concord Investments' President David Delaney; Milestones followed a waterfall methodology and were tracked in Microsoft Project.

Manhattan Plots [Results]: Performed a GWAS to determine single nucleotide polymorphisms influencing ERAP-2 expression in Utah residents with EU ancestry and Yoruba individuals from Nigeria in R with data from the 1000 Genomes project.

SKILLS

Languages	Verilog, C/C++, Arduino, Python, MATLAB, R, LaTeX
Frameworks	TensorFlow
Hardware Design	AutoCAD, Altium, Multisim

EDUCATION

Bachelor of Applied Science, Electrical Engineering, University of Toronto 2022 - 2027

- Dean's Honours List (cGPA: 3.98/4.00)
- Trustworthy Machine Intelligence, ECE Mentorship Program

Summer Abroad, University of Siena Summer 2023

- Website documenting the experience in progress

Ontario Secondary School Diploma, University of Toronto Schools 2015 - 2021

- Governor General's Medal (highest cumulative average)