Iliya Shofman

iliya.shofman@mail.utoronto.ca
https://iliyashofman.wordpress.com

Key Skills

- Proficiency in Python, MATLAB and SolidWorks; completed coursework in C++ and Verilog
- Experience with analog electronics, PCB design, radio-electronic circuits, oscilloscope, debugging
- Fabricating various materials, using power tools and machining equipment
- Troubleshooting issues in a methodical and creative manner

Education

BASc in Engineering Science (Electrical & Computer Engineering), University of Toronto — 3.74 GPA — 2019-Present

- Machine Shop and Welding Training at George Brown College
- Calculus, Linear Algebra, Differential Equations, Computer Science, Probability & Statistics
- Electromagnetism, Circuit Theory, Digital & Computer Organization, Engineering Design

Honors and Awards

- NSERC USRA: National Science & Engineering Research Council of Canada, Undergraduate Student Research Award — 2021
- First Year Summer Research Fellowship Grant Recipient — 2020
- Wallberg Admission Scholarship to First Year of Engineering Science — 2019
- 2nd place in Northern California Science Olympiad for Mission Possible — 2019

Experience Highlights

MODELICS Lab, Summer Research Intern — May-August 2021

- Helped verify accuracy of results from a novel computational electromagnetic solver by creating a Python library for calculating the Radar Cross Section of lossy dielectric spheres.
- Presented research at the Undergraduate Engineering Research Day (UnERD) Conference.

Reconfigurable Antenna Laboratory, Summer Research Intern — May-August 2020

- Researched space antenna deployment methods suitable for aerospace industry partner.
- Designed a novel mechanism for high-gain, bandwidth deployable metasurface antenna.
- Created SolidWorks and physical prototypes; developed testing setup to evaluate performance.

Science Olympiad, High School Captain and Volunteer — 2017-Present

- Designed devices and completed Olympiad tests that won awards at the state tournament.
- Coordinated a team of 10 individuals working on 6 engineering competition projects.
- Developed and delivered a training course introducing physics, engineering design, and fabrication skills to high-school students as a volunteer mentor.

Computer Science and Digital Electronics Training — 2018-2020

- Completed a two-year career-technical education course with hands-on instruction.
- Wrote programs and designed a GUI application in Python.
- Built digital circuits using discreet components & Verilog code for FPGA development platform.
- Designed and built a simple autonomously navigating robot using an Arduino and sensors.

References Available