

Jeffrey Ming Han Li

(647)613-0118 | Jeffreyli2288@outlook.com

Education

University of Toronto | Toronto, Ontario

September 2023 – May 2028

Engineering Science; intended B.S.E degree in Aerospace Engineering

Oakville Trafalgar High School | Oakville, Ontario

September 2020 – June 2023

Skills

Experimental Physics: Vacuum Pump, Ansys Simulation, Comsol Simulation, and Fourier Frequency Analysis

Engineering: CAD, Circuit Design, Electrical Equipment, 3D Printing, Soldering, Motors

Languages: C++, Python, Java, HTML | Matlab, Arduino

Framework: TensorFlow, Git, Matplotlib

Engineering & Research Experiences

Student Researcher & Team Member at Canada IYPT National Camp

CaYPT Committee | North York, Ontario

May 2022 – March 2023

- Designed and constructed a high precision force sensor for measuring the buoyancy by hydraulic Jump
- Modeled a finite element simulation with Ansys Fluid using the Eulerian-Lagrangian model on particle settlement in an inclined rectangular container.
- Conducted a Fourier analysis of the harmonics produced by a rotating disk with holes.
- Programmed a numerical calculation of the magnetic forces between 2 ferrite magnets by implementing discrete analysis on Biot-Savart Law.
- Designed and constructed a Linear rail system to measure the hysteresis curve of a rubber membrane

Computer Repair Engineer

Oakville Trafalgar High School | Oakville, Ontario

Jan. 2023 – July 2023

- Repaired 15 laptops & computers for the school robotics team

Leadership & Teaching Experiences

Chief of Student Resources

STEM Fellowship | North York, Ontario

July 2022 – Present

- Organized an online repository to instruct students on how to conduct science experiments
- Hosted the 2023 Canadian Young Physicists Tournament

Physics Seminar Organizer

Self-Organized | Online

Oct. 2021 – Nov. 2021

- Established an online seminar with more than 80 participants
- Advised participants regarding entrance & preparation for Physics & Math contests

Contest Organizer & Ontario Physics Society Co-Founder

Co-Founded | Oakville, Ontario

Jan. 2023 - Present

- Coordinated a 2-hour long physics contest with 100 participants
- Composed 12 physics problems for the contest

Honors & Awards

Silver Medal – International Young Physicist Tournament Online (OYPT)

- Represented Team Canada in the 2022 Online IYPT.

11th Place Worldwide – Sir Isaac Newton's Physics Exam 2022

- Ranked 11th Place out of 2000 Participants

Top 50 Placement Worldwide – Sir Isaac Newton's Physics Exam 2023

- Ranked 11th Place out of 2000 Participants

Silver Medal – Canadian Young Physicist Tournament (CaYPT)

Top 25 Percentile – AAPT Physics Bowl