

Kaleb Ruscitti

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EDUCATION

BSc. IN MATHEMATICAL PHYSICS
Expected Aug. 2021 | Waterloo, ON
Term Dean's List (All Terms)
Cum. Average: 80.0%
Major Average: 87.7%

LINKS

Github:// [kalebruscitti](#)
LinkedIn:// [kaleb-ruscitti-b4a2659b](#)
Personal: [kaleb.ruscitti.ca](#)

COURSEWORK

UNDERGRADUATE:

Modern Physics
Linear Algebra
Calculus
Waves, Electricity and Magnetism
Mechanics

ONLINE:

Information Theory
HTML/CSS

SKILLS

TECHNICAL

Programming:

Python • Java • \LaTeX • HTML/CSS

Industry:

Analog Circuits • Optics • Experimental Design

Certifications:

WHMIS • Laser Safety • Compressed Gas and Cryogenics

SOFT

Languages:

English (Native) • French (Professional) • Mandarin (Conversational)

Workplace:

Procurement • Team-Leadership • Graphic and Presentation Design

EXPERIENCE

INSTITUTE FOR QUANTUM COMPUTING | RESEARCH ASSISTANT

Jan. 2017 - Present | Waterloo, ON

- Undergraduate Research Assistant working on the Quantum Information with Trapped Ions team under Dr. Rajibul Islam.
- Designing control circuitry and optical cavities for the lasers used for trapping ions.
- Researched various concepts relating to physical and quantum optics, and presented findings and ideas to the group.

PROJECTS

PID DESIGN | ANALOG CIRCUIT STABILIZER

Jan 2017

- Designed a schematic for an Analog PID, to maintain a constant output voltage, then built a prototype on a breadboard. A finalized variation of the design is being used to stabilize the output frequency of high-power lasers.

N-BODY CLASSICAL GRAVITATION SIMULATION | PYTHON PROGRAM

July 2015

- Over a week, wrote code in Python that simulates the motion of bodies in a solar system due to Newtonian gravitation. The program also displays a graphical visualization of the motion that updates in real time.
- Uses Python 2.7 with the Pygame package for visualization and Tkinter for the GUI.

AWARDS

2016 top in region

2016 international finalist

2016 regional

2016 regional

2016 high-school

2015 4th overall

2015 10th %tile

Euclid Mathematics Contest

DECA International, in Apparel and Accessories Marketing

Rotary Club Scholarship to an Outstanding Student

Kiwanis Club Barrie Scholarship to a Student Leader

Silver Award for Academic and Extracurricular Excellence

DECA Ontario, in Public Relations Project

Avagadro Chemistry Contest

WHAT DO I PUT HERE