Kaleb Ruscitti | Curriculum Vitae

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Undergraduate student pursuing a Mathematical Physics degree. Interested in research and application of physics and mathematical techniques, bringing fast learning and strong interpersonal skills to the workplace.

Work Experience

Institute for Quantum Computing   **Waterloo**
Research Assistant   *January 2017 - Present*

At the IQC I work alongside a team of researchers to design, build and maintain a trapped-ion qubit array, so that we can use it to run quantum information experiments. I design and build optical and electrical laboratory equipment.

Education

Academic Qualifications

University of Waterloo   **Waterloo**
B.S. (Hons) Mathematical Physics Co-op , Term Dean's Honors List.   *2016–2021*

Innisdale Secondary School   **Barrie**
OSSD, with Ontario Scholar.   *2012–2016*

Notable Projects

- **ECHacks Project (Nov. 2016):** *'Data Analysis Suite'*

  At the ECHacks hackathon in 2016, I worked with two other undergraduates to build a suite that can record a set of data, take a regression of that data and then visualize the data set in intutitve ways using a simple neural network. I specifically worked on the neural network and visualization aspects of the project.

- **N-body 2D Gravitation Simulator (July 2015):**

  Using python I wrote software that will simulate the motion of planets orbiting around a central sun, and display the motion real time. It is an accurate model of Newtonian gravitation, and can handle up to 5-10 different bodies interacting at once (depending on hardware).

Technical and Personal skills

- **Programming Languages:** Proficient in Python, including SciPy, with basic understanding of HTML/CSS and Java.

- **Industry Skills:** Experience with analog circuits, optical equipment and laboratory procedures.

- **General Skills:** Working proficiency in French, conversational Mandarin, strong interpersonal skills.

References

- Personal and professional references are available upon request.