

IAN PORTO

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EXECUTIVE SUMMARY

Space Engineering Student with a main focus on Research and Development for Space Applications
Dedicated and dependable student with a high degree of responsibility and eagerness to learn and contribute

EDUCATION

Bachelor of Engineering - Space Engineering, Lassonde School of Engineering Sep 2021 - Present
8.1 GPA (of 9), Grade A average, Lassonde Entrance Scholarship
Lassonde Undergraduate Research Award ×2
Lassonde Undergraduate Research Award Fall/Winter ×2
Dean's Honor roll

OSSD & French Certified, Hodan Nalayeh Secondary School Sep 2017 - Jun 2021

CERTIFICATES

- Project Management Foundations Sep 2024
- Basic Certificate of Proficiency in Amateur Radio, Callsign VA3PZZ Dec 2023
- STK Level 1 Jan 2023
- C4 Change Maker Aug 2022

EXPERIENCE

Research Assistant Feb 2023 - Present
Nanosatellite Research Lab.
Toronto, ON
Under the supervision of Dr. Regina Lee

- Currently working on STK validations for multiple projects. The first is Validating the findings of RSOs from a balloon Flight Mission. The second is an orbital analysis for our Industry Partner.
- Designed an Unscented Kalman Filter for the improvement of a preexisting Orbital Determination Algorithm
- Presented Research at the Lassonde Undergraduate Research Conference
- Presented Research to the Lassonde School of Engineering community through a video series
- Assisted Regular Team Training and Meetings
- Assisted Regular Update meetings

Space Engineering Ambassador (Recruitment & Campus Ambassador Lead) Apr 2024 - Present
Lassonde School of Engineering
Toronto, ON

- Assist with the creation and delivery of effective outreach programs including recruitment presentations, information session, and discussion panels.
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- Lead campus tours for prospective and current students
- Promote awareness of resources on campus to support first year student transition.
- Acts as an ambassador and role model by helping students navigate York University's processes and procedures.
- Create program and event materials.
- Assist with planning and implementing program initiatives, orientation activities and campus events.
- Develop website and social media to share ideas with students, provide information and promote events.
- Motivate and act as a team lead to Recruitment & Campus Ambassadors

Swimming Instructor Sep 2018 - Jun 2021
LIV North Inc. (Schwartz/Reisman Community Center Pool)
Vaughan, ON

Life Guard Dec 2019 - Jun 2021
LIV North Inc. (Schwartz/Reisman Community Center Pool)
Vaughan, ON

PUBLICATIONS

- V. Suthakar, I. Porto, A. B. Baires, A. A. Sanvido, M. Myhre, & R. S. K. Lee, High-Altitude Optical Imaging of Resident Space Objects (RSOs) from Stratosphere. Acta Astronautica (under review).
- I. Porto, T. Barrett, L. Gierull R. Qashoa, R. Clark, R. S. K. Lee, (August 2023). Solving the Degeneracy Issue in Finding Keplerian Elements Using Unscented Kalman Filters. Lassonde Undergraduate Research Conference.

PROJECTS

REDWING Microsatellite A Canadian R&D microsatellite for Space Domain Awareness. In this project, I work on verifying and validating orbits and attitudes for the REDWING Microsatellite while working closely alongside our industry partner (Magellan Aerospace)

DAVINCI-360 (Capstone Project) A sub-Payload of the York University's Nanosatellite Lab's R3 Mission, set to launch on the [CSA's STRATOS 2025 Mission](#). The Goal of the project is to take 360-degree images from the Stratosphere for scientific and artistic awareness purposes.

ESSENCE CubeSat A project funded by the CSA's [Canadian CubeSat Project](#). Worked under the Systems sub-team to facilitate everything from critical design review to Integration and Systems testing. Launched in June 2023 on SpaceX CRS-28

Grown in Woburn Worked with a Team of Interdisciplinary Students to Build a project to help citizens of the Woburn community combat food insecurity. Through the C4 Cross Campus Capstone course

OUTREACH & VOLUNTEERING

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| • Summer Camp Presentations , Aurora, Ontario | Aug 2024 |
| • This Is Lassonde Podcast | Jan 2024 |
| • Lassonde Undergraduate Research Award Video Series | Jul 2023 - Aug 2023 |
| • Orientation Captain , Lassonde Week0, Lassonde School of Engineering | Jun 2023 - Sep 2023 |
| • Highschool Outreach Presentation | Jun 2023 |
| • Satellites and You , Ontario Science Center | Mar 2023 |
| • Store Manager , Lassonde Engineering Society | Sep 2022 - Apr 2023 |
| • Orientation Leader , Lassonde Week0, Lassonde School of Engineering | Aug 2022 |

TRANSFERABLE SKILLS

Technical Skills	STK Level 1, 3D Design & Print, LaTeX, Solidworks, Fusion360, AutoCAD, Excel
Programming Skills	Advanced Python, Advanced Matlab, Intermediate Java, Intermediate Visual Basic
Soft Skills	Group management, Conflict Resolution, Organized, Reliable

LANGUAGES

English	Native or Bilingual Proficiency
Spanish	Native or Bilingual Proficiency
French	Professional Proficiency
German	Basic Proficiency