

IAN PORTO

(647) 575 - 4364 ◊ Toronto, ON

ianporto2003@gmail.com ◊ [linkedin.com/in/Ian-Porto](https://www.linkedin.com/in/Ian-Porto) ◊ IanPorto.ca

EDUCATION

PhD Student - Earth and Space Sciences, Lassonde School of Engineering Sep 2025 - Present
York Graduate Scholarship (\$ 6,000) Sep 2025
Mitacs Globalink Research Award Abroad (\$ 12,000) Jan 2026
Queen Elizabeth II Graduate Scholarship in Science and Technology (\$ 15,000) Sep 2026
Enbridge Graduate Student Award (\$ 12,500) Sep 2026

Bachelor of Engineering - Space Engineering, Lassonde School of Engineering Sep 2021 - Jun 2025
Graduated First Class With Distinction. Member of Dean's Honour Roll.

EXPERIENCE

Research Assistant & International Liason Jan 2026 - Present
Universidad Politécnica de Madrid, Instituto Universitario de Microgravedad "Ignacio Da Riva" *Madrid, ES*
Under the supervision of Dr. Regina Lee, Dr. Angel Porras-Hermoso and Dr. Elena Roibas Millan

- Assist with the development of the UPMSAT-4 mission
- Manage relations between international academic institutions ensuring that all stakeholders are satisfied with mission progress.
- Work as the Project Manager for York University's payload onboard the satellite.

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

- Developed and performed a thermo-optical characterization and qualification test for the York University Multi-Use Star Tracker Payload onboard UPMSAT-4
- Develop a payload for the UPMSAT-4 mission which will provide future Space Scientists and Engineers with invaluable data for various learning experiences.
- Worked on STK validations for multiple projects. The first is Validating the findings of RSOs from a balloon Flight Mission (resulting in two publications). The second is an orbital analysis for our Industry Partner.
- Presented Research at the Lassonde Undergraduate Research Conference
- Presented Research to the Lassonde School of Engineering community through a video series

Teaching Assistant - Multiple Courses Sep 2025 - Present
Lassonde School of Engineering & York University *Toronto, ON*

- Renaissance Engineering 1 (ENG 1101) (Sep 2025 - Dec 2025)
- Computational Methods for Space Engineers (ESSE 2220) (Sep 2025 - Dec 2025)
- History of Astronomy (NATS 1745)
- Understanding Colour (NATS 1870)
- Science, Tech and the Environment (NATS 1840)

Space Engineering Ambassador (Recruitment & Campus Ambassador Lead) Apr 2024 - Jun 2025
Lassonde School of Engineering *Toronto, ON*

- Facilitated student transitions by conducting campus tours, acting as a peer role model, and providing guidance on navigating university procedures and resources.
- Managed digital and physical outreach by developing website content, social media strategies, and promotional materials to increase event awareness and student engagement.

PUBLICATIONS

- **I Porto**, M Myhre, S Mesón-Pérez, A Porras-Hermoso, G Sohn, R SK Lee, Hardware-in-the-Loop Validation of Physics-Informed Neural Network for Angles-Only Initial Orbit Determination in Very Short Arcs, 46th COSPAR Scientific Assembly 2026 (Accepted)

- M Myhre, **I Porto**, V Suthakar, R SK Lee, Shallow Neural Network Centroid Algorithm Comparison for a Dual-Use Star Tracker Payload for Space Situational Awareness, 46th COSPAR Scientific Assembly 2026 (Accepted)
- **I Porto**, M Myhre, V Suthakar, RSK Lee, Thermo-Optical Characterization and Qualification of a Space Situational Awareness (SSA) Payload, 5th IAA Conference on Space Situational Awareness.
- M Myhre, **I Porto**, V Suthakar, R SK Lee, Centroid Algorithm Comparison in a Dual-Use Star Tracker for Space Situational Awareness.
- V Suthakar, **I Porto**, SKM Dasanayaka, RSK Lee, MI Robert, R Olteanu, A Bucur, M Kübler, JI Hubbard, M Scherillo, F Newland, V Braun, Stratospheric Observation of Resident Space Objects using Photometric and Infrared Sensors. 9th European Conference on Space Debris,
- V. Suthakar, **I. Porto**, M. Myhre, A. A. Sanvido, R Clark, & R. S. K. Lee, RSONAR: Data-Driven Evaluation of Dual-Use Star Tracker for Stratospheric Space Situational Awareness (SSA), MDPI Sensors.
- **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.

CERTIFICATES

- ESA Academy - Space Standards Training Course Jun 2026
- STK Grand Master Apr 2026
- STK Master Integration Apr 2026
- Project Management Foundations Sep 2024
- Advanced Certificate of Proficiency in Amateur Radio, Callsign VA3PZZ Dec 2023

PROJECTS

UPMSAT-4, YU-MUST Payload: I am currently working as the project manager on the York University Multi-Use Star Tracker payload which will fly onboard Universidad Politécnica de Madrid's satellite, UPMSAT-4.

Space Engineering Alumni Event: I presented alumni from various fields including the Canadian Space Agency, MDA Space, and more. I focused on keeping a large audience engaged, and developed the presentation to ensure active participation from all of the Alumni.

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, launched on the [CSA's STRATOS 2025 Mission](#). The mission took 360° images of the sunset and night sky.

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

OUTREACH & VOLUNTEERING

- **Space Engineering Gateway Events**, Various Events Sep 2024 - Present
- **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