Inspiring a new generation in space technology and engineering through initiatives that tie theory to practice, challenging youth to think critically, creatively, and collaboratively.

@ATLASCubeSat
SuperNOVA is a not-for-profit initiative of Dalhousie University that promotes science, engineering, technology, and mathematics (STEM) to youth in Atlantic Canada. Based out of Halifax, Nova Scotia, SuperNOVA offers engaging and innovative workshops, summer camps, clubs, and community events throughout Atlantic Canada that provide youth with rewarding experiences in STEM and nurture a life-long love of exploration, creativity, and academic achievement. As well as providing our youth engagement programs, SuperNOVA provides a wide variety of training to teachers and educators to improve STEM education across a variety of sectors.

GALAXIA is a new space technology company in Halifax, Nova Scotia that designs and develops Edge Intelligence (EI) On-Board Computer (OBC) hardware for Low Earth Orbit satellites and high-altitude airborne vehicles, optimized to perform in-flight Machine Learning (ML) and Artificial Intelligence (AI) algorithms. GALAXIA, a new but established partner of SuperNOVA, has been specifically identified for their distinct knowledge and experience with satellite design. GALAXIA will bring their immense experience in small satellite design to ATLAS, ensuring that the curriculum is cutting edge, and contains state-of-the-art research.

Dalhousie Space Systems Lab (DSS), a research team of students and faculty focused on the development of nano-satellites that operate in the Low Earth Orbit. These multifunctional spacecraft carry various scientific instruments to conduct research and can be used to demonstrate capabilities for newly designed space systems.
SuperNOVA, GALAXIA, and Dalhousie Space Systems Lab are partnering to launch ATLAS (ATLantic Academy of Space), which is a new educational initiative that will introduce Atlantic Canadian high school students to space exploration, artificial intelligence (AI), engineering, and technology through an intensive two-week CubeSat satellite design program at Dalhousie University.

ATLAS will work towards gender parity and a target of 50% Indigenous and Black student enrollment, collaborating with youth-serving organizations to promote the opportunity. The first of its kind in Atlantic Canada, ATLAS will offer learning experiences in AI, software, and hardware development, instilling a range of mathematics, computer science, and engineering skills. Combining a high level of program interaction with meaningful experiences will empower youth to find confidence and success in STEM. The program curriculum will be hands-on and tailored specifically for high school students, presenting participants with advanced, real-world scenarios, challenging youth to think critically, creatively, and collaboratively.

ATLAS will challenge students to engage with satellite data and to think critically about how satellite data can be used to solve real-world problems. ATLAS will introduce participants to mentors, industry experts, and professionals working in the space, engineering, and AI sectors by leveraging relationships with community and industry partners.

The Summer Academy will facilitate two cohorts of 30 participants each in a free-of-charge, two-week program during the summer of 2022 at Dalhousie University.
ATLAS
Summer Academy

Program Details

- **Dates:** July 18, 2022 - July 29, 2022, OR; August 2, 2022 - August 12, 2022
  - Drop-off between 8:30 am - 9:00 am
  - Programming between 9:00 am - 4:00 pm
  - Pick-up between 4:00 pm - 4:30 pm
  - 3 meals per day will be provided

- **Accommodation:**

In 2022, we are pleased to announce that we are going to offer free-of-charge residential accommodation to all participants. Accommodations will be offered at the Gerard Hall residence (next to the Sexton Campus), if you need more information please email info@atlasscubesat.ca. Travel stipends are available for participants, please email info@atlasscubesat.ca for more details.

- **Application Process:**

You will need to fill out the application form (bit.ly/ATLASapplication2022) and a letter of intent. **Applications must be submitted by March 20, 2022,** and decisions will be made by April 18, 2022.

A letter of intent (LOI) is a document where you get to explain to us why you want to be in the ATLAS Summer Academy; for example, what skills do you have now that you want to enhance through the program? What do you want to learn? We know that writing a letter of intent might be difficult, but it just means that we want to get to know you! Here are some topics you may want to include:

- Why are you interested in STEM?
- What excites you about space exploration?
- What are you hoping to learn at the Summer Academy?
- Do you have STEM role models in your life? How do they inspire you?
- Outline any previous experiences in computer science/mathematics

Note that all COVID-19 protocols will be followed, as per instructions from Nova Scotia Public Health and Dalhousie University, to deliver in-person programming.
Contact Information

Do you have any questions? You can contact us via e-mail or phone:

E-mail: info@atlas.cubesat.ca
Phone: 902-210-6220

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