

A small sailboat with a yellow sail is positioned in the center of a large body of water. The water is dark blue with gentle ripples. In the background, a dense line of green trees borders the water. The sky is a vibrant blue with wispy white clouds. The overall scene is bright and clear, suggesting a sunny day.

2023 - 2024

**SPONSORSHIP
PACKAGE**

**DALHOUSIE MICROTRANSAT
AUTONOMOUS SAILBOAT
TEAM**



ABOUT US

WHO WE ARE

DalMAST is a team of Dalhousie students, from first year to Master's level, of over 20 students broken into Electrical, Software, and Mechanical sub-sections, under the coordination of a project management committee to construct an autonomous sailboat going to Ireland as part of an international competition..

The past iteration of our boat set a record in the field of ocean robotics, and with our recent improvements, the project will potentially be the first fully autonomous sailboat to cross the Atlantic.

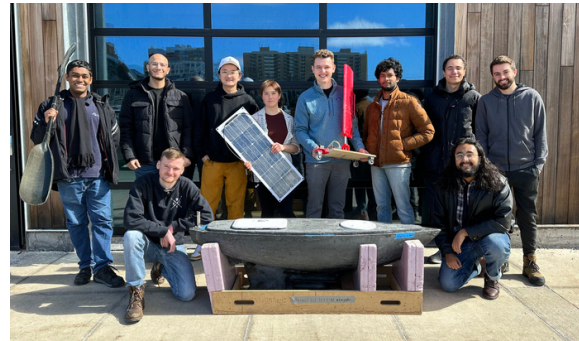
As a dedicated student team aiming to make a significant impact, we have minimal resources, and are therefore requesting financial support in order to meet this goal.



THE COMPETITION

The **Microtransat Challenge** is a transatlantic race for autonomous boats, which must meet the following specifications:

1. The boat must be fully autonomous
2. The boat must only use wind power for propulsion
3. The hull overall length must be less than 2.4 meters



OUR SAILBOATS

The **Sea Leon**, named after Dr. Leon - the previous Dean of Engineering at Dalhousie, was launched in the summer of 2018. It travelled for **more than 3700km over 76 days**.

Our current sailboat, **Nautono**, runs on our own developed autonomous navigational software. This allows the boat to traverse the ocean without any human interaction or intervention.

Using a dozen pre-programmed large area waypoints and real-time wind, GPS, and compass data gathered by the boats onboard sensor suite, the boat calculates smaller waypoints as it sails. The onboard sensor data is transmitted back to us via satellites on the Iridium network, so the path and diagnostic information can be trended over time and displayed live for everyone to see.



- The sailboat's power is supplied by an array of lithium iron phosphate batteries and several solar panels mounted on the boat to increase the reliability and availability of power.
- The hull is made of carbon fibre to decrease mass.
- The vessel uses a free-rotating wing sail for propulsion and a rear rudder for directional control.



AVAILABLE PACKAGES

| Bronze | Silver | Gold | Platinum |
|---|---|---|--|
| CA \$500 | CA \$1500 | CA \$3000 | CA \$5000 |
| Acknowledgement on our Social Media platforms | Acknowledgement on our Social Media platforms | Acknowledgement on our Social Media platforms | Acknowledgement on our Social Media platforms |
| | Your logo printed on the back of our 2023-2024 Organization T-Shirt | Your logo printed on the back of our 2023-2024 Organization T-Shirt | Your logo printed on the back of our 2023-2024 Organization T-Shirt |
| | | Your logo will be printed on the Sailboat | Your logo will be among the largest logos printed on the Sailboat |
| | | Pre-launch Pictures with your logo | Pre-launch Pictures with your logo |
| | | | Pre-launch Special Social Media Coverage and Acknowledgement of your Company |
| | | | Opportunity to host our Sailboat at a social function within Nova Scotia |

*All sponsorship packages valid for one year postpurchase
Except for Platinum



OUR BUDGET

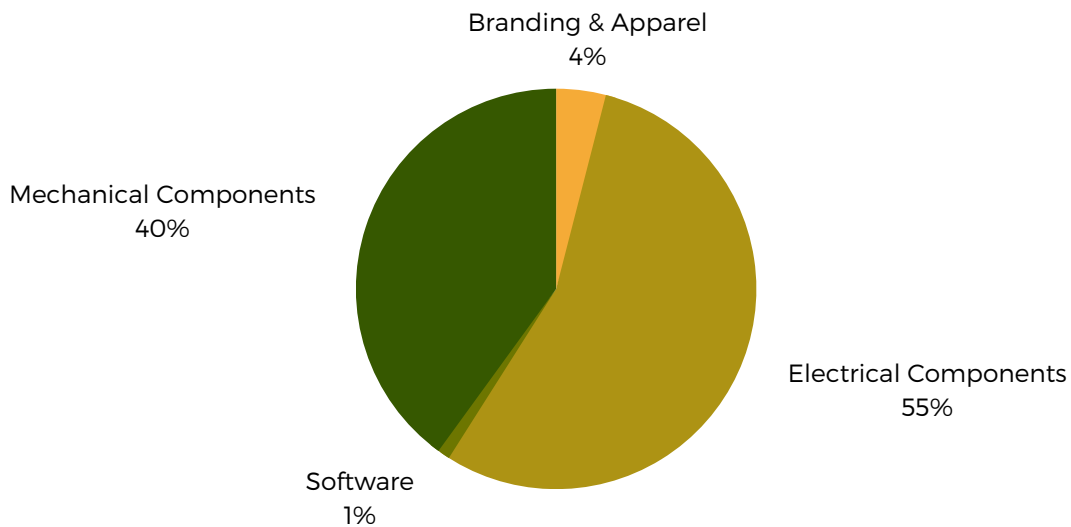
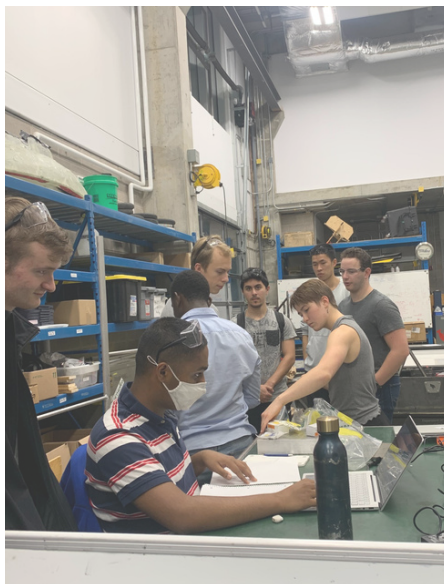


Figure 1. | Dalhousie Autonomous Sailboat Budget



REACH OUT:

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THANK YOU!

We are dedicated to achieving excellence and reliability in our project goals. The project experiences we provide foster students who are driven, adaptable and possess strong critical thinking skills. This involvement prepares them to confidently enter the workforce and tackle more complex endeavours.

Working with such talented individuals is a privilege that continually inspires me whenever I step into the prototyping lab. Our students have the opportunity to apply concepts that complement their academic studies and gain invaluable knowledge that extends beyond the confines of a classroom.

We sincerely appreciate the generous donations and contributions you have made. Your investment in the future, commitment to community engagement, and support of our student-led design team are greatly valued and recognized. We express our heartfelt gratitude in advance for your kind and generous support.

Sincerely,

Mahmoud Mahmoud

Mahmoud Mahmoud
Project Manager