SONIA

PUSHING ROBOTICS TO NEW DEPTHS



PARTNERSHIP PLAN 2026-2027

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ÉTS
Le génie pour l'industrie
ÉCOLE DE TECHNOLOGIE SUPÉRIEURE
Université du Québec

The Team

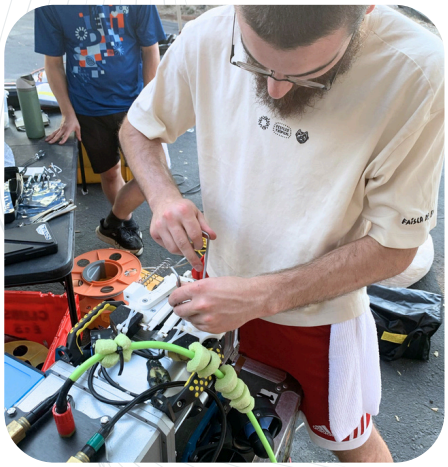


S.O.N.I.A., the autonomous submarine club at the **École de technologie supérieure**, excels in the design of autonomous submarines that incorporate the latest technological advancements. A commitment to sharing and collaboration is deeply rooted in S.O.N.I.A.'s philosophy.

The mechanical team
is responsible for the design and fabrication of the submarine's hull, as well as its internal support systems. Their expertise is crucial for ensuring the watertight integrity and robustness of the submarines.

The electrical team
designs and manufactures power distribution, motor control, and communication systems, thereby ensuring the proper operation of the vehicles and the integration of the various sensors.

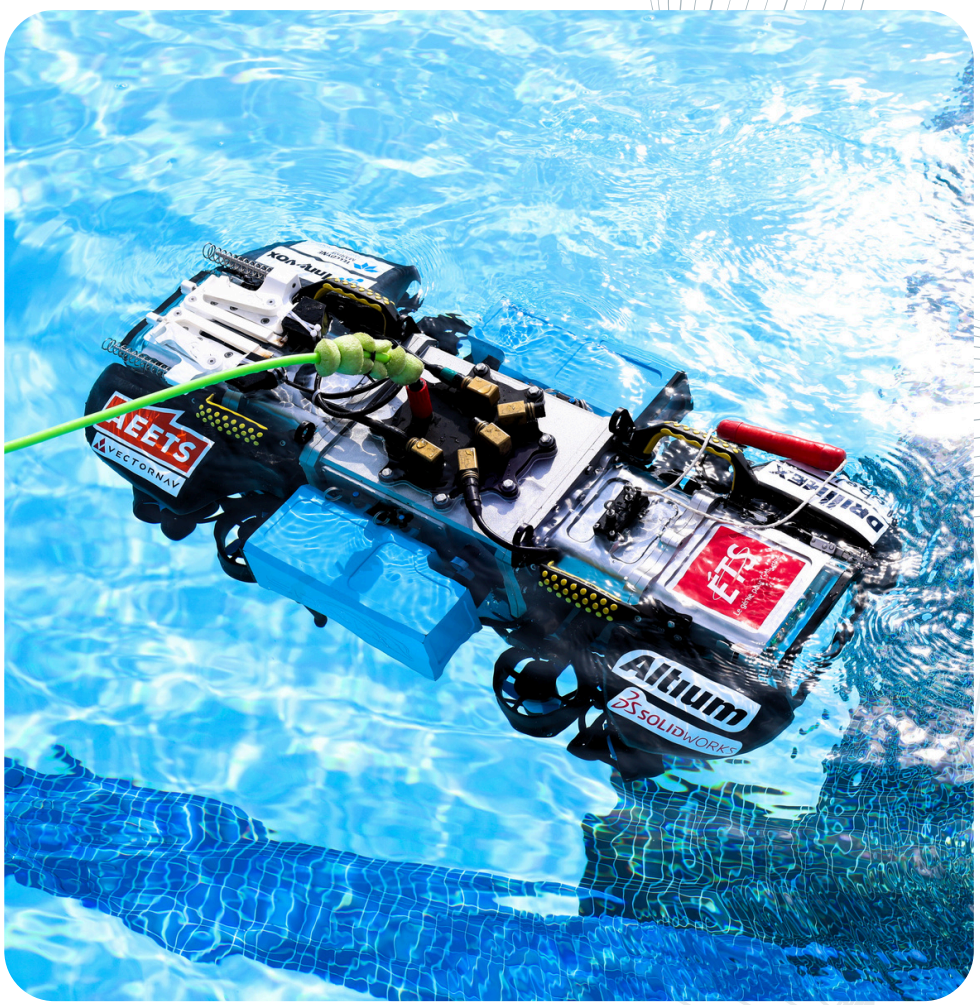
The software team
develops the systems that process data from sensors, as well as the artificial intelligence that makes the submarines autonomous and ready to compete on a global scale.

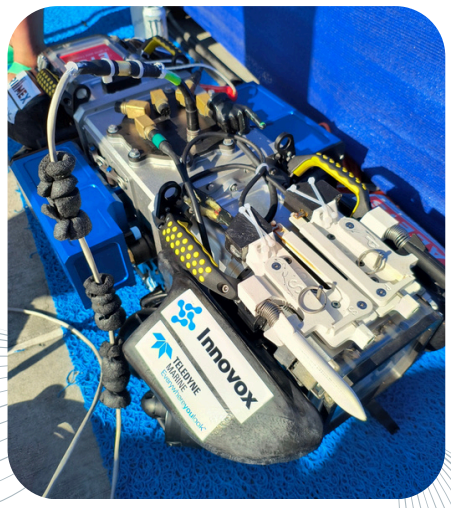






SUBMARINE : AUV 8.1

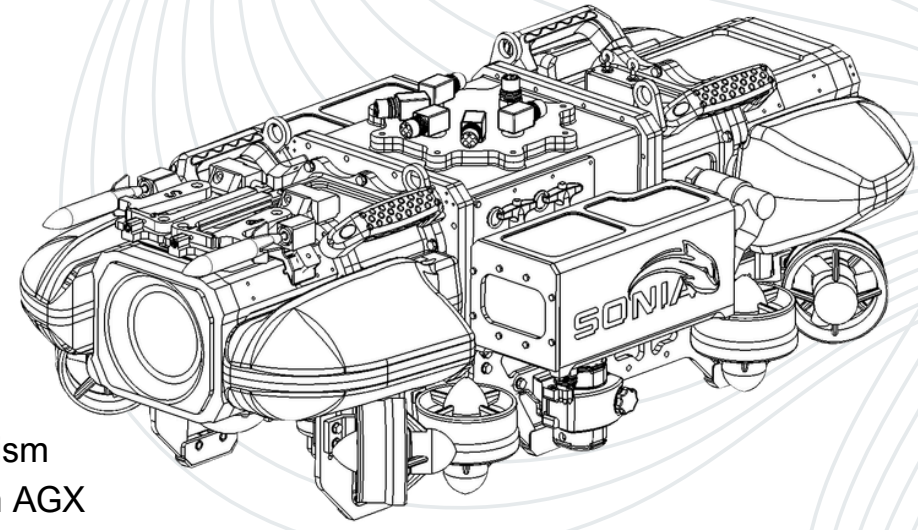




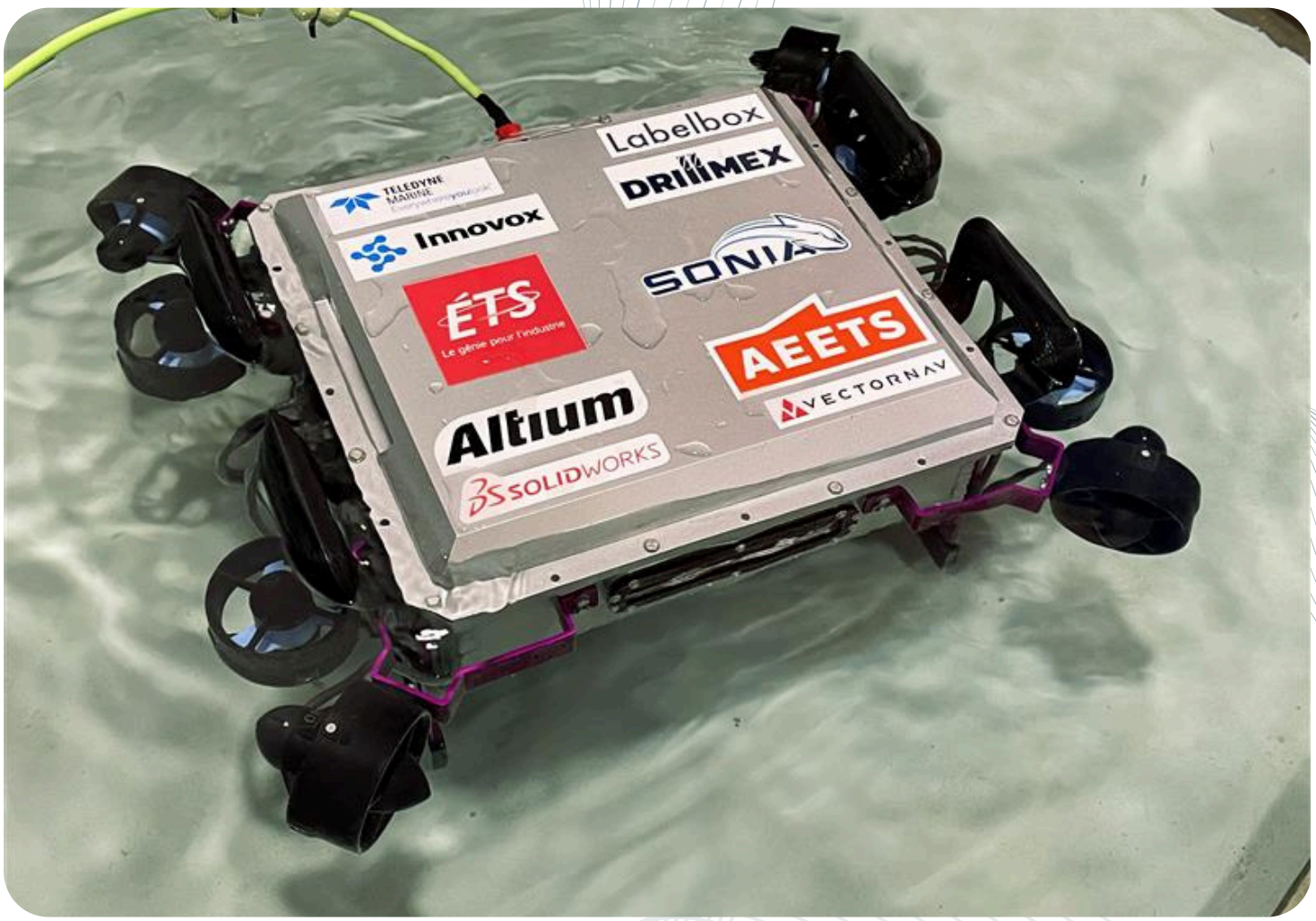


TECHNICAL SPECIFICATIONS

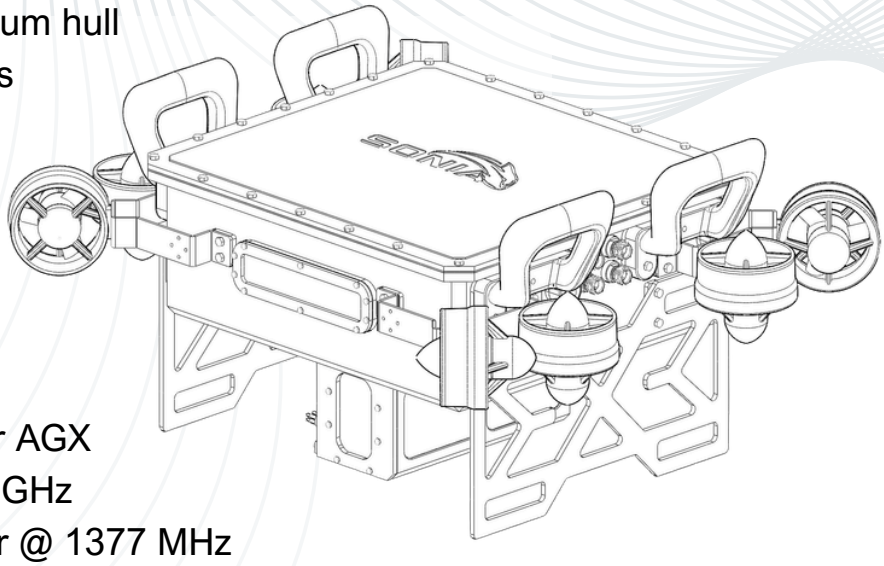
- Anodized and painted aluminum hull
- 8 thrusters
- 6 degrees of freedom
- Navigation sensors :
  - DVL
  - Depth sensor
  - IMU
  - Stereo camera
- Actuator system :
  - Torpedoes
  - Marker deployment mechanism
- Onboard computer : Jetson Orin AGX
- 2 externals batteries
- Endurance: 1-3 hours, depending on the task performed



SUBMARINE : LITE 1



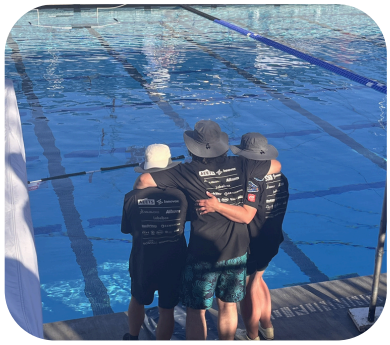
TECHNICAL SPECIFICATIONS



- Welded and power-coated aluminum hull
- Anodized mounts and accessories
- 8 thrusters
- 6 degrees of freedom
- Navigation sensors :
  - Depth sensor
  - IMU
  - ZED 2i stereo camera
- Onboard computer: Jetson Xavier AGX
  - 8-core ARM processor @ 2.2 GHz
  - 512-core graphics accelerator @ 1377 MHz
- Endurance: 45 minutes to 1 hours, depending on the task performed



Your support enables the club to undertake new projects each year and to innovate in the field of autonomous underwater vehicles. Your help also allows the team to participate in an annual competition and to push their personal boundaries. Without you, this adventure would not be possible.







FINANCING CHARTER

	Diamond	Platinium	Gold	Silver	Bronze
Visual identification	+$7500	+$5000	+$3000	+$1000	+$500
Logo on the web site	✓	✓	✓	✓	✓
Logo on the banner	✓	✓	✓	✓	✓
Logo on the competition uniform	✓	✓	✓	✓	
Logo on the submarines	✓	✓	✓		
Logo on the promotional video	✓	✓			
Digital visibility					
Logo on our publications	✓	✓	✓		
Logo in our highlights	✓	✓	✓		
Custom publication	✓	✓			
Reel / presentation video	✓				
Benefits and exchanges					
Sending a thank-you plaque	✓	✓	✓		
Workshop visit and meeting with the team	✓	✓			
Flexible benefit to be defined together	✓				

*Software partnerships are limited to the Platinum tier and below.
**Partners providing non-financial support are evaluated based on market value.

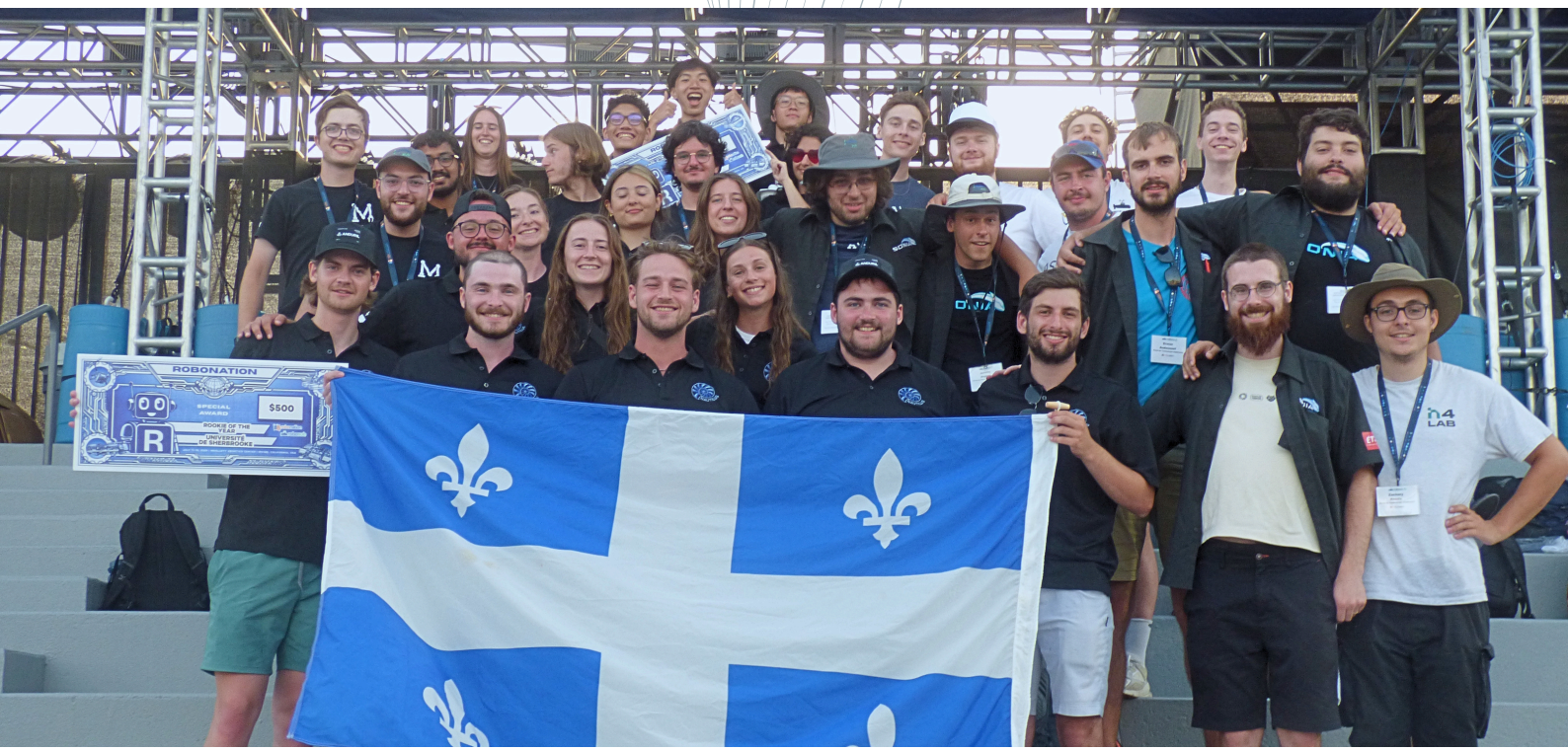
BENEFITS

Impact and Visibility
The S.O.N.I.A. club offers you increased visibility within the second-largest engineering faculty in Canada. ÉTS trains more than 25% of all engineers in Quebec. Furthermore, the club has over 1,200 followers on social media.

Talent and Recognition
Your support for the club helps increase your company's visibility among a multidisciplinary community of talented and committed students who will be entering the job market in the coming years.

Social impact
In addition to the design of autonomous submarines, the club's mission is to promote science and engineering among young people. By supporting the club, you demonstrate your commitment to this social mission.

OUR ACHIEVEMENTS: AN INNOVATIVE TEAM



Awards & Honors

- **1st Place – MathWorks Simulation Challenge** (2025)
- **1st Place – Anges du Génie:** Intelligent or Automated Systems (2025)
- **RoboSub Special Award: Best in Style** (2024)
- **RoboSub Special Award: Data Sharing Pioneers** (2022)
- **Judges' Award: Inter-vehicle Communications** (2022)
- **1st Place – Overall Ranking – QC AUV Challenge** (2021)

Design & Documentation

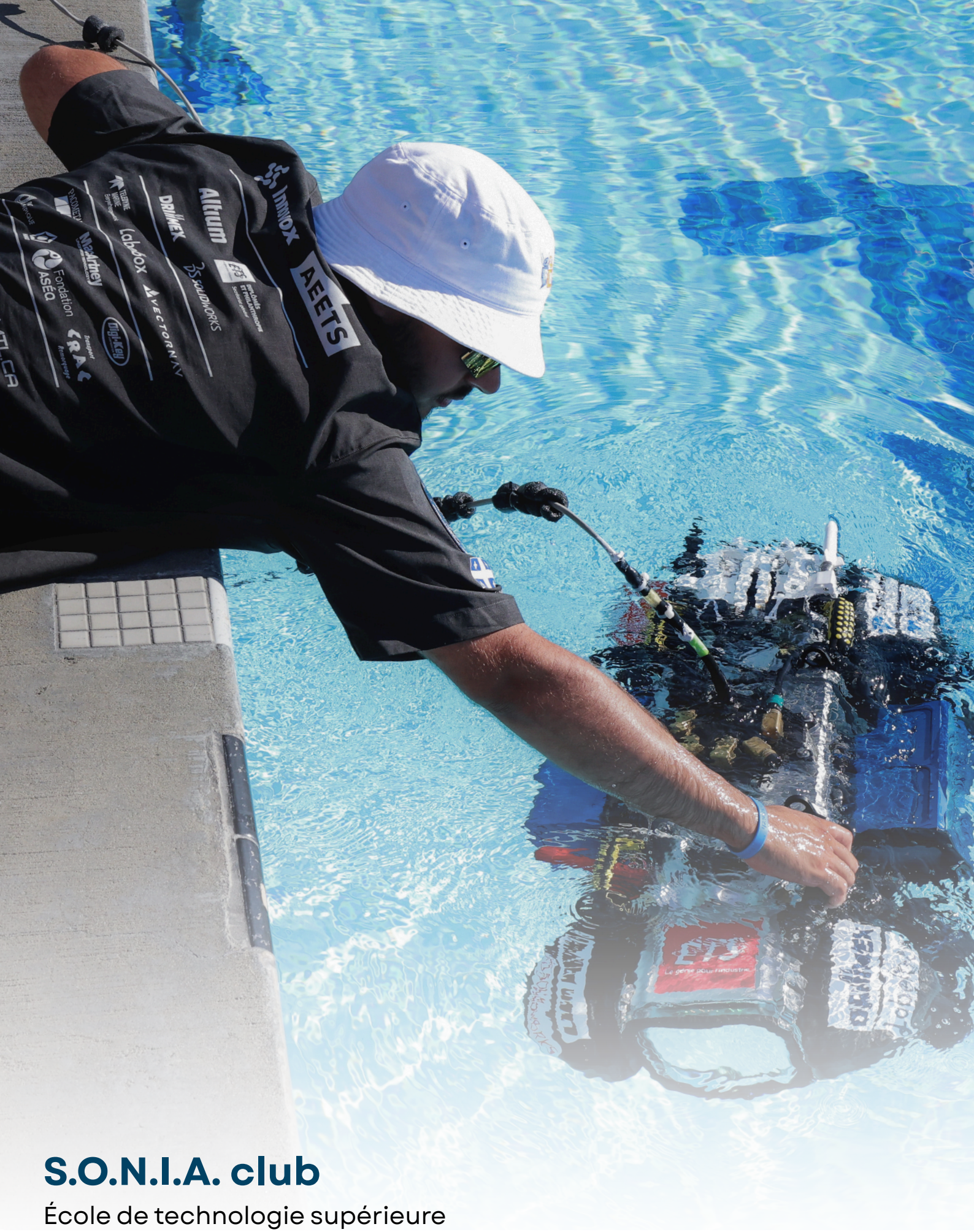
- **4th position –** Design Documentation (2024)
- **4th position –** Technical Design Report (2023)
- **5th position –** Assessment Rankings (2023)
- **2nd position –** Design Documentation (2022)

Key Achievements

- **First Canadian team** to use an inter-submarine communication system (2022)
- **Creation of the QC AUV Challenge competition**
- **First Canadian team** to participate in RoboSub in 2000

Skills & Videos

- **3rd position –** Team Introduction Video (2025)
- **1st place –** Skills Video – Hull Design (2021)
- **2nd position –** Skills Video – Sensor Optimization (2021)



S.O.N.I.A. club

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