

ROBOSUB 2025

École de Technologie Supérieure
SONIA

Community & Outreach Description

This year, the S.O.N.I.A. team participated in multiple outreach activities. Like last year, we hosted an activity during our university's day camp. This year's activity was about Archimedes' principle. The children learned about the differences between mass, weight, volume, and density. They then put what they learned into practice in our testing basin with some balloons and some weights. We had 3 groups of around 20 kids each between 5 and 12 years old.

We also represented our club and our school at Montréal's FIRST Tech Challenge. FIRST organizes multiples robotic competition for all ages from PreK to 12th grade. For the Tech Challenge, teams of students aged 12 to 18 must design and build a remote-controlled robot to complete various tasks. They then compete in multiple rounds were two alliances, each made up of two teams, face off in an arena to score the most points possible. Since the theme of this year's event was underwater exploration, we reached out to both our school and the organizers to setup a kiosk during the competition. Throughout the day, we presented our club and its projects to hundreds of children of all ages. We also presented during the TakTik 2025 competition, which is very similar to the FIRST Tech Challenge, and again we introduced S.O.N.I.A. to hundreds of kids.

During the year, we were contacted by two groups of students from local universities who wanted to start their own RoboSub teams. The group from the Université de Sherbrooke wants to build their first prototype has part of their capstone project and plan to participate in RoboSub 2026. They are starting from scratch and reached out to us for advice on where to begin and what to avoid when launching a new team. We were happy to help with the design and offered to assist when building their submarine. We are trying to find an opportunity to test our submarines at their school as a demonstration. We also were contacted by a group from the UQTR (Université du Québec à Trois-Rivières). Their team hasn't participated in a competition since RoboSub 2023, and they wanted to revive the club and join the 2026 edition. While they still have some resources from the previous team, they are all new members and as such they reached out to us for some guidance. Once again, we offered our support. During the next year, we are planning to continue helping both teams progress in this wonderful adventure that we call RoboSub. Finally, we aided a local after-school program for girls in science called "Les Scientifines." They organization helps girls from age 8 to 15 to complete their own scientific projects. One of the team wanted to build a small radio-controlled submarine, so they reached to us for help. We visited their school multiple time to discuss their design and help them build their prototype.

