

## **Ecole de technologie superieure**

### **Community and Outreach**

#### Québec AUV Challenge

Most of our team members never had the chance to participate in person to a RoboSub competition and we knew that it would be important to not leave the team unprepared for the next in-person competition. In this mindset, we have organized and participated to a friendly competition with McGill and Trois-Rivière during November 2021. The new members were able to participate for the first time at a real-life competition. In general, this friendly competition was a success and we have really appreciated the implication of all the teams and volunteers that participated. Finally, we would like to note the implication from the divers of the HMCS Donnacona that have supervised the submarines during the competition.

#### Data Sharing

A recurrent situation when using Artificial Intelligence is the lack of data. We are all facing challenges in multiple departments of our teams, and we don't have necessarily enough time to get all the data we need to train or test our models, and this even more true for new teams. When the idea about starting a Data Sharing Platform started, we accepted immediately to be a part of it. On the Data Sharing Platform, the uploaded data isn't just about training and test data for AI models. The teams can also share their mechanicals, electricals, and software designs to help the whole community.

#### Euréka

The festival "Euréka" is the biggest science fair in Quebec and is for a family audience. The mission of the festival is to bring awareness for the future generations on the possibility of a sustainable development. For us, the goal and mission of "Euréka" join our goal to give back to the community by promoting the scientific field in elementary and high schools. The team has participated at the 2022 edition "Water in all its states". The members have presented the team and the submarine during a 35-minute conference. For us, we really liked the experience and hope coming back next year to inspire the young mind for the scientific field.

#### School presentation

As mentioned in the previous section, the team believes that sharing knowledge is essential for the advancement of robotics. Since 2018, S.O.N.I.A gives back to the community by presenting its project in elementary schools. The team firmly believes that the presenting a project as ours can inspire children to pursue their studies in a scientific field. This year, we were able to do 8 presentations in different elementary schools in Quebec which for us is a great achievement since the restrictions have been lifted in less than a month before the end of the school year.

