

TartanAUV Community & Outreach Submission
April 27, 2026

Our organization began the academic year by hosting events within the CMU community to recruit for our club and teach the student body about underwater autonomy. We tabled at the CMU First Year Orientation Community event and the university's Club Fair. During these events, we talked to first-year students and taught them about our club and how we compete in the RoboSub competition. Open to all CMU students, we held four learning sessions that covered state estimation, controls, intro to ROS, and intro to computer vision. Along with these learning sessions, we held an open session in our university's athletic pool where we let students drive our AUV and ask questions.

Our main education event was our collaboration with FIRST LEGO League team, Steel Synapse. We hosted this enthusiastic group of 7th graders and their families to CMU campus. The team presented their ideas for drones tackling archaeological challenges, including a soil-sampling system designed to determine whether excavation sites are worth further exploration. Our members offered tips on robot-building best practices and answered questions. We also gave the students and their families a tour of our workspace and showcased our AUV. During the event, we drew similarities to the RoboSub competition and their FLL competition. Since then, we have kept in touch with the team and their journey as they move on to nationals.

This spring, we took part in "doghouse", a CMU tradition that occurs during our annual Spring Carnival. Along with other organizations, we spent a week building and decorating a fully wooden doghouse. Ours was sonar themed!

Also within the CMU community, we have been involved with the opening of the new Robotics Innovation Center. With our organization's strong advocacy, we are the only undergraduate group to be working and testing in the new water tank. We are extremely grateful for the opportunity to test in the new facility. We worked with CMU's media and communications department to develop a news story that was released during the ribbon cutting event for the RIC.

During the 2026 NVIDIA GTC Conference, we held a collaboration event with another CMU organization, Roboclub. With the help of our shared sponsor, NVIDIA, we hosted a watch party for Jensen Huang's keynote. This was a great opportunity to connect with robotics-focused students in Roboclub, as well as networking with NVIDIA employees who attended the event. We made sure to teach them about the RoboSub competition and how we use NVIDIA products to achieve the autonomy challenge goals.

Our last events occurred at the end of the semester, where our organization partnered with two robotics clubs from the University of Pittsburgh: Pittsburgh Electric Propulsion and the Robotics and Automation Society. One afternoon we toured robotics labs on CMU campus, and another day we toured robotics labs on UPitt's campus. We also had the opportunity to see what the students were working on, and showcase our AUV to them. We spent a lot of our time talking to Pittsburgh Electric Propulsion club's first experience in RoboBoat this year and shared comparisons to RoboSub.