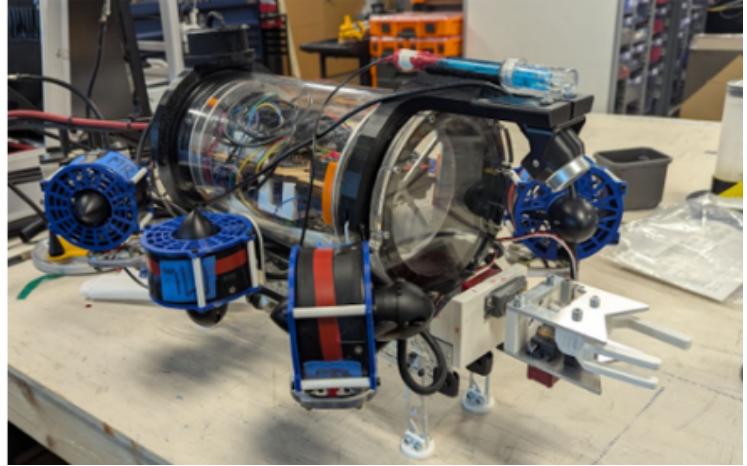
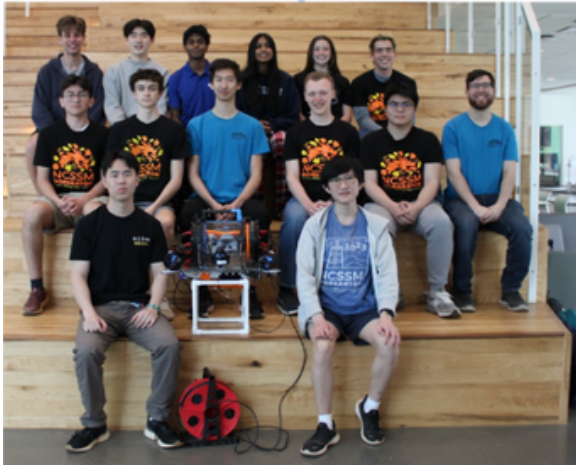


LEVIATHAN COMPANY SPECS

2025 North Carolina School of Science and Math
Underwater Robotics Company Morganton, NC, USA



From left to right, top to bottom: Julian Monzavifar (12) - Lead Mechanical Engineer, Tech Writer; Henry Chen (11) - Mechanical Engineer, Electrical Engineer Tech Writer; Ishaan Joshy (11)- Programmer; Riya Reddy (11)- Mechanical Engineer, Electrical Engineer, Tech Writer; Stella Friedman (11)- Mechanical Engineer, Electrical Engineer, Tech Writer; Noah Senzon (11)- Mechanical Engineer, Electrical Engineer; Sebastian Gonzalez (11)- Lead Float Engineer, Mechanical Engineer, Electrical Engineer, Tech Writer; Brecken O'Leary (11) - Mechanical Engineer, Programmer; Larry Zhao (12)- CEO, Lead Programmer, Electrical Engineer, Tech Writer; Sam Day (11)- Mechanical Engineer, Electrical Engineer, Tech Writer; Bao Truong (11)- Mechanical Engineer, Programmer; Matthew Hilton - Mentor; Stephen Zhou (12) - Lead Electrical Engineer, Safety Officer, Tech Writer; Eric Li (12) - Finance Officer, Float Engineer, Programmer, Tech Writer

925 miles traveled, third year competing with MATE

ROV Name: Nautically Engineered Mechanical Object 2nd generation (NEMO 2)

Total Cost: ~\$4,800

Weight: ~10 kg

Size: 55 cm x 40 cm x 22 cm

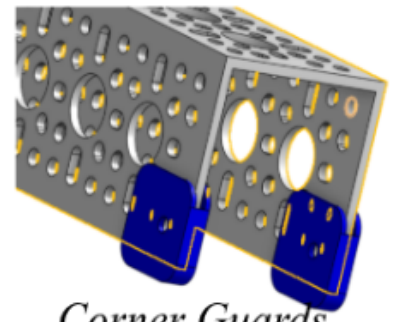
Total Student Hours to Design and Build: ~450 hours

Safety Features:

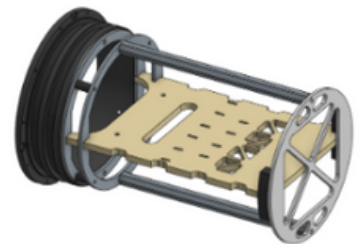
- Thruster Guards: Our thruster guards prevent debris from entering the thrusters while maintaining low drag
- 25A fuse and 2A fuse
- Corner Guards and Sanded Edges: Sharp edges along the polycarbonete frame, aluminum thruster - mounts, U-Channel, and manipulator are sanded down, with 3D-printed PLA corner guards attached to the corners of the U-Channel. This protects the employees from cuts and abrasions.

Special Features:

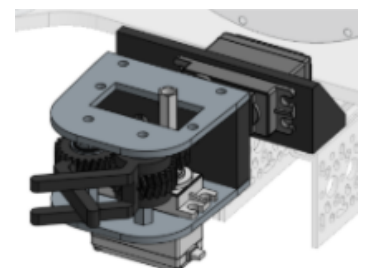
- NEMO 2 features a claw that was prototyped, cut, and assembled completely in-house
- NEMO 2 uses ROS (Robot Operating Software), a software system that is currently being used in the industry. It is not used that often in this competition class, and we are proud to be committed to using the industry standard.
- NEMO 2 has an innovative removable electrical enclosure, simultaneously improving the wiring organization and the accessibility of the wiring



Corner Guards



Electronics Housing



Manipulator