Hydro Homies
USNCC, San Diego, CA, USA

4 Years participating in SeaPerch
2 Times at the International SeaPerch Challenge

Our SeaPerch is unique because: (100 words MAX)
Everything on the ROV can be adjusted. The parts are modular and easy to adjust and replace. The speed can be adjusted with our custom controller so the team can handle a slower, more maneuverable speed for the mission course and a fast speed for the obstacle.

SeaPerch Design Overview: (100 words MAX)
Hydro Homies has a streamline, hydrofoil-shaped ROV. The motors are in nacelle casings to make them as hydrodynamic as possible. It consists of many modular components to be able to change between a hydrodynamic obstacle course form to a task-ready mission course form. The ROV has a camera that helps during poor weather and it helps align the ROV through hoops and mission course challenges. A custom controller is included and allows adjustment to the speed through potentiometers. The counter-rotating props will also bring the speed of our ROV to its max potential.

Our biggest takeaway this season is: (100 words MAX)
We learned how to predict results without being able to test it. We had a period at the beginning of the season where we did not have any pool practices, but we still wanted to improve our ROV. We had to refer back to the “Imagine” step and “Research” step on the Engineering Design Process to make the right adjustments. Another takeaway we had was using the strengths of each of the team members to maximize the potential of our team.