SeaPerch Design Overview: (100 words MAX)

Our parts were individually designed to be as light and efficient we could, making the ROV as fast as possible. The shrouds interior design was based on an airfoil to have the maximum flow rate possible. For our claw, we took inspiration from linkage used in a claw machine, and modified it further. Our frame was very minimalistic.

Neutral buoyancy - floats are balanced to give the ROV a neutral buoyancy, giving it increased control

Minimalistic frame - Frame is extremely minimalistic to avoid adding any unnecessary weight, increasing speed

Manipulator design - Designed with the mission course in mind, the claw is uniquely designed to pick up rock samples without loops

Hydrodynamic cones - Cones placed on top of the motors to decrease drag and increase speed

Our biggest takeaway this season is: (100 words MAX)

Our biggest issue we faced was a lack of time. Our members were balancing sports, jobs, and school along with robotics. Additionally several members got sick during the season, and the ROV broke twice due to misplacement. Despite all of these setbacks, we were still able to finish the ROV on time due to our collaboration. The team’s greatest takeaway from the season is that teamwork is the key to success. Our two new members helped reduce the tasks each person had to do compared to last year, and our overall cooperation was a big contribution to our success.