Team Anglerfish
Mayport Costal Sciences Middle School - Jacksonville, FL

STOCK CLASS

1 Years participating in SeaPerch
1 Times at the International SeaPerch Challenge

Our SeaPerch is unique because: (100 words MAX)

Adaptable Frame Design: Our team used a PVC pipe frame that can be adjusted for buoyancy and motor positions to adapt to course challenges. Ultralight: Weighs less than an ounce to reduce the buoyancy required for neutral buoyancy and decrease hydrodynamic drag. Adjustable Buoyancy: Light plastic bottles for buoyancy that can slide forward and aft to adjust ROV pitch based on the driver’s preference. Variable Speed Controller: To improve ROV control, resistors and a switch were added to the controller. This allows the driver to use full or reduced power and slow down the ROV during challenging tasks.

SeaPerch Design Overview: (100 words MAX)

Our ROV is designed to be fast and maneuverable, thanks to its unique features. One of the reasons behind its speed is the smaller frame made from round and flattened PVC, which makes it more streamlined. Additionally, we have made collapsible parts that help in making our ROV compact and agile when navigating through the hoops course. The ROV is also very adaptable, thanks to the adjustable buoyancy feature. This allows us to have positive, negative, or neutral buoyancy, making it versatile and suitable for various underwater tasks.

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

This is our first year in robotics and we have learned that failure is actually a good thing. This is because it helps us learn new things from our mistakes. For instance, when our motors broke down, we learned how to butt splice and put in new motors. Communication has also been a key factor in our success. It has helped us when we got stuck on the hoops course. Additionally, we have learned that teamwork is essential. Every team member has a role to play in working towards building the best ROV we can.