

Spec Sheet

Coral Crusaders ROV
Redmond, Washington
Distance to Pacific Northwest Regionals: 50km



Coral Crusaders is a second-year returning Redmond-based team.



Listed from left to right:

Dylan Wu is the electrical engineering lead and worked on the float design. He is in 11th grade and attends Eastside Preparatory School.

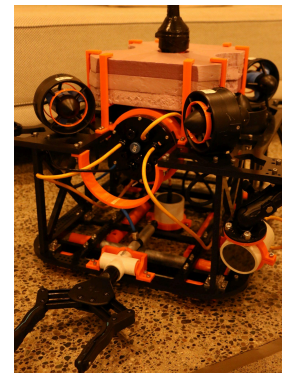
Kounish Bhattacharjee is the financial lead and tether/prop specialist. He is in 10th grade and goes to International School.

Vehd Reddy is the mechanical engineering lead and worked on the ROV design. He is in 10th grade and attends Eastside Preparatory School.

Rishi Pudipeddi is the programming lead and worked on software design. He is in 10th grade and goes to Eastside Preparatory School.

Jesse Li is the science lead and worked on camera design. He is in 11th grade and goes to Eastside Preparatory School.

Spooky Jobs (Right) includes 6 Blue ROV T200 thrusters for 5 degrees of freedom in movement and 2 adjustable IP cameras for better quality images in different fields of view. Tooling is covered by one gripping pneumatic claw for completing tasks. The ROV features buoyant foam at the top and adjustable non-toxic bismuth and steel rod ballast at the bottom for adjustable buoyancy. The ballast at the bottom and buoyant foam at the top maximizes the distance between the center of mass and the center of buoyancy to ensure stability. The ROV frame is custom-machined from ABS for toughness.



Cost: \$3,053.66

Weight: 9.98kg

Dimensions: Length: 50.0cm Height: 37.3cm Width: 55.0 cm

Safety: 3-D printed thruster guards cover each thruster. The frame of Spooky Jobs has been sanded so that there are no sharp edges. There is a humidity sensor present in the enclosure to detect the presence of liquid so that the electronics can be shut down in an emergency. The quality of the IP cameras allows the robot to easily maneuver and avoid obstacles. Everyone is versed with the Fluid Power quiz for the safe use of pneumatics.

Total Man-Hours: 850 hrs

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