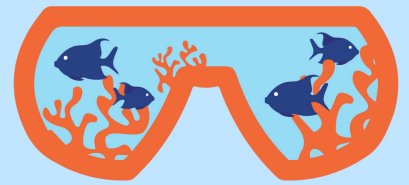


Dragonfly



Coral Crusaders ROV

Unaffiliated

Redmond, WA, USA

Distance to World Championships: 3000km

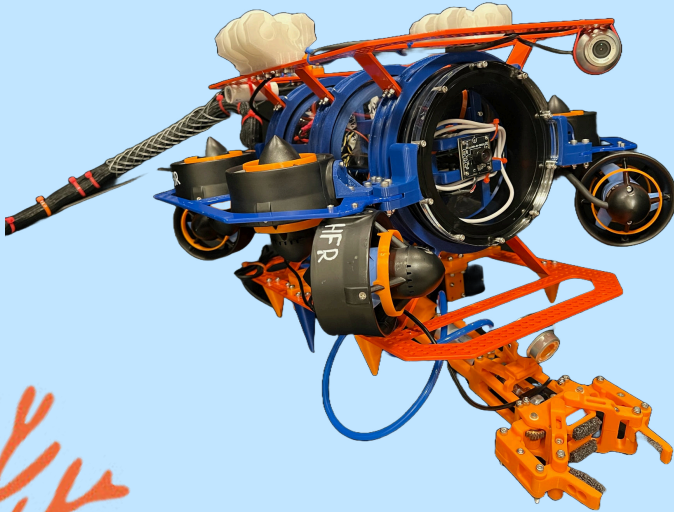


Figure 2. ROV Dragonfly
Photo Credit: Vehd Reddy

Safety Considerations



Deburred & Powder Coated Aluminum

Creates a smooth finish to protect against incisions.



Humidity Sensor

Ensures quick shutdown of electronics in an emergency.



Thruster Guards

Guards all operating personnel from injury.



Lifeguard Training

Safety net in case personnel fall into pool. Two members are trained.

Cost: \$3,984.74

Weight: 10.80kg

Total Man-Hours: 1497 hours

Length: 45.0cm

Height: 32.0cm

Width: 47.0 cm

Dragonfly (above) is designed around modularity, movement, and strength. Its custom-machined aluminum frame is lightweight and has equally spaced mounting holes all over for flexibility. Our differential wrist allows for both rotation and pitching, supported by each of the two servos, while the underactuated gripper ensures an encompassing grip while maximizing component longevity. Adjustable steel ballast at the bottom of the ROV keeps it perfectly neutrally buoyant, and 8 Blue Robotics T200 thrusters enable all 6 degrees of freedom, with stability software and four low-latency USB cameras for a smooth piloting experience.

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

**Returning member*



Vehd Reddy '26
CEO & Mechanical Lead*



Dylan Wu '25
COO & Electrical Lead*



Rishi Pudipeddi '26
CTO & Software Lead*



Vedant Mahawar '26
Documentation &
Operations Lead



Jian Chen '26
Mechanical Engineer



Adam Robinson '27
Mechanical Engineer



Kounish Bhattacharjee '26
Finance Lead*



Ananya Kunnath '26
Outreach Lead



Andy Pan '27
Camera Engineer



Jesse Li '25
Electrical Engineer*