

NEMO

ROV Specifications



Tether Length:
15 meters



Dimensions:
Length, Width, Height:
36 cm x 36 cm x 28 cm



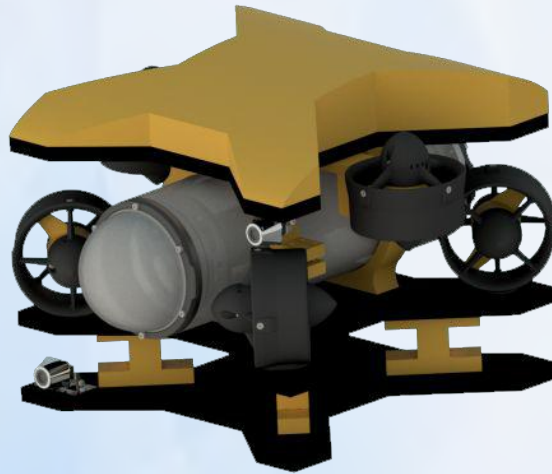
Top Speed:
0.70 m/s



Weight:
7.62 kilograms



Maximum Rated Depth:
100 meters



CAD Design of NEMO

Special Features

Electrical System

Firmata Protocol
Modularized components



Software System

Open Source
Depth/Attitude Stabilization
Kalman IMU Sensor Filter



Manipulators & Sensors

Primary & Auxiliary Cameras
Bar30 Depth Sensor
Customized gripper



Safety Features

Motor Intake Guards
Emergency Shut-off Button
Student Training



Company History:

Rogue Robotics was founded in 2017, and this is its first year of competing in MATE, although some members have prior experience. The club is not affiliated with any school or organization. Members are in grades 9-12.

Company Information:



Photo Credit: Alice Lai

Company photo: (members listed left to right)

Rishi Salwi	Electrical Lead; 2nd year	290 hrs.
Alice Lai	CEO, Pilot, Software Lead; 4th year	390 hrs.
Eric Zheng	Mechanical Lead; 2nd year	320 hrs.
Alisa Lai	Electrical Engineer; 2nd year	215 hrs.
Sam Alws	Software Engineer; 2nd year	185 hrs.
Gloria Liu	Mechanical Engineer; 1st year	215 hrs.
Ananth Koppol	Electrical Engineer; 1st year	185 hrs.
Sophie Zhang	CFO, Mechanical Engineer; 1st year	260 hrs.
Bryan Yao	Mechanical Engineer; 2nd year	215 hrs.

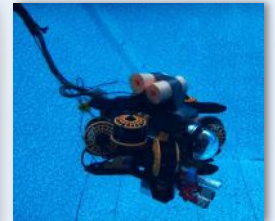


Photo Credit: Eric Zheng

Nemo ROV during a pool test



Distance to Seattle:
4643.4 kilometers



Total Cost:
\$2702.00



Total Work Hours:
2275 hours