

# MUREX ROBOTICS



ATTEMPT.  
THE.  
IMPOSSIBLE.  
THINK DIFFERENT.  
THINK MUREX.

## TEAM INFO

**COMPANY NAME:** MUREX Robotics  
**SCHOOL:** Phillips Exeter Academy,  
Exeter, NH  
**CLASS:** Ranger  
**DISTANCE TO COMPETITION:** 882 mi  
**RANGE OF GRADE LEVELS:** 9-12th grade  
**MATE HISTORY:** Returning Team  
(3 years of Ranger competition)

## TEAM MEMBERS

Byran Huang [CEO, EE Lead, Drive Team]	(3rd Year/'25)
Ethan Cheng [CFO/Software]	(3rd Year/'24)
Altan Unver [CTO, Drive Team]	(2nd Year/'25)
Yash Shah [Mechanical Lead, Drive Team]	(1st Year/'25)
Adam Tang [Mechanical Lead]	(3rd Year/'25)
Marvin Shim [Software]	(1st Year/'27)
Crane Lee [Electrical]	(1st Year/'27)
Varit Asavathiratham [Electrical, Pilot]	(1st Year/'25)
Max Liu [Electrical, Safety, Drive Team]	(2nd Year/'26)
Anika Sivarasa [Mechanical, Drive Team]	(1st Year/'26)
Osbert Chang [Mechanical Engineer]	(1st Year/'27)
Kat Lopez [Aquatics, Logistics, MechE]	(1st Year/'25)








## ROV INFO

**ROV NAME:** MUREX ROV V3.5  
**COST:** \$5500  
**SIZE:** 0.65m x 0.55m x 0.3m  
**WEIGHT:** 12.5kg in air  
**TOTAL HOURS:** +1000h total

## MENTORS:

Mr. Charles MamoLo, Ms. Courtney Shaw, Mr. Doug Hanson

## SAFETY

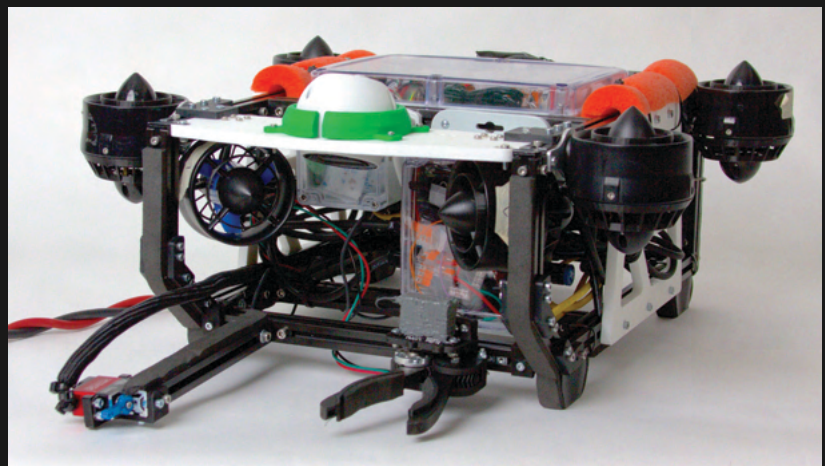
FULL SYSTEM POWER MONITORING   
 TRANSIENT, OVER/UNDERVOLT, SHORTING,  
 REVERSE POLARITY PROTECTION   
 25A FUSE   
 METAL WIRE STRAIN RELIEF   
 IP20 THRUSTER GUARDS   
 SOFTWARE DEFINED HARD LIMITS   
 EMERGENCY POWER OFF SWITCH 

## FEATURES

10-DoF SENSING   
 6-DoF MOVEMENT   
 22-state advanced EKF stabilization   
 4 wide-FOV cameras   
 +13 custom open source electrical system  
 +10 electrical world firsts   
 Aluminum extrusion exoskeleton 



Team Photo at the MATE ROV New England Regionals. Photo: Ms. C. Shaw



MUREX ROV V3.5. Photo: E. Liu (photographer)

EXETER DO IT RIGHT.  
DO IT MUREX.

