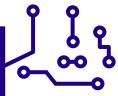


HMS SeaBots: Ranger Team



Our Team

Chris Bauer - CEO, Software Engineer, Grade 8

Jonathan Yao - COO, Software Engineer, Grade 8

Areeba Wani - CTO, Electrical Engineer, Grade 8

Cherry Abraham - CFO, Electrical Engineer, Grade 8

Dayyan Imran Shaikh - Software Engineer, Grade 8

Saajan Shah - Mechanical Engineer, Grade 8

Abhishek Kotgire - Mechanical Engineer, Grade 8

Krisha Mahajan - Pilot, Electrical Engineer, Grade 8

Sabrina Jamil - Job Safety Officer, Mechanical Engineer, Grade 8

Aarushi Aloni - Job Safety Officer, Software Engineer, Grade 8



From left to right: Cherian Abraham, Dayyan Imran Shaikh, Christopher Bauer, Saajan Shah, Jonathan Yao, Aarushi Aloni, Krisha Mahajan, Sabrina Jamil, Areeba Wani, Abhishek Kotgire

Team Information

- School: Harrington Middle School
- ❖ Location: 514 Mt. Laurel Road Mt. Laurel, NJ 08054, USA
- ❖ Distance to PA Regional: 45 miles
- ♦ Distance to International Competition: 2,752 miles
- ♦ Only our CEO, Chris Bauer, has MATE experience

2017 HMS SeaBots Ranger Team History

2017 PA Regionals at Villanova University

- **♦** 1st Place Product Demonstration
- ❖ 2nd Place Overall

HMS SeaBots Ranger Team School History

2016 Internationals at NASA NBL in Houston, Texas

❖ 3rd Place Overall

2016 PA Regionals

- ♦ 1st Place Overall
- ❖ 1st Place Product Demonstration
- ♦ 1st Place Spirit and Sportsmanship
- 2nd Place Marketing Display
- 2nd Place Technical Documentation

2015 PA Regionals (First HMS SeaBots: Ranger Team)

- ❖ 1st Place Product Demo
- ♦ 1st Place Spirit and Sportsmanship

ROV Specifications

Special Features:

- Neutrally buoyant tether
- ❖ 4 Johnson 500 GPH bilge pump motors
- ❖ 3D printed shrouds
- ♦ HD 8-LED night vision camera
- ❖ Arduino Uno to control gripper
- Standard Gripper Kit A with 100 degree opening/closing capability
- ♦ HiTec HS-646WP servo for gripper
- Red LED Raman spectrometer device
- One-way valve agar sampler

Estimated
Total Cost
\$1,356.14



Total
Student
Hours
500 hours

Safety Features:

- Shrouds marked with warning tape
- Strain reliefs for wires
- ❖ Kill switch for main power
- ♦ Heat sink plate in control box
- ❖ 25 Amp inline fuse

Measurements:

- Size in L x W x H: 40cm x 33cm x 30cm
- ❖ Weight: 2.33kg

















