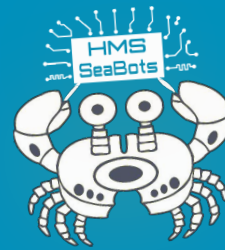


HMS SeaBots

2019 MATE Internationals



Employees

Adithya Selvakumar

CEO, Lead Software Engineer,
Mechanical Engineer
Grade 8, 2nd Year

Aayush Talreja

CTO, Lead Mechanical Engineer,
Pilot
Grade 8, 2nd Year

Rohan Gawande

CFO, Lead Electrical Engineer,
Co-Pilot
Grade 8, 2nd Year

Saketh Rudraraju

JSO, Mechanical Engineer
Grade 8, 1st Year

Brael Tagsip

Software Engineer;
Grade 8, 1st Year

Numa Wani

Electrical Engineer;
Grade 8, 2nd Year

Spoorthy Reddy

Software Engineer
Grade 8, 2nd Year

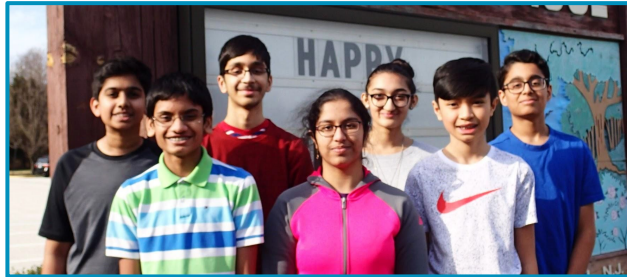
Mentors

Ms. Maureen Barrett

mbarrett@mtlaurelschools.org

Ms. Marieve Patterson

mpatterson@mtlaurelschools.org



Top Row: Saketh (JSO, Co-Pilot), Aayush (CTO, Pilot), Numa, Rohan (CFO)
Bottom Row: Adithya (CEO), Spoorthy, Brael (Photo credit: M. Barrett)



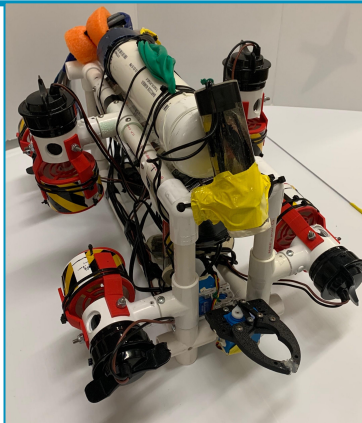
Harrington Middle School,
Mt. Laurel, NJ, USA



Distance to Internationals:
550.7 miles



2000 company hours worked



ROV *Lincoln* (Photo credit: Saketh R.)



5.8 Kilograms



ROV Dimensions (cm):
41 x 38 x 21



\$2604.92 USD

Special Features

6 Thruster Setup

Six thrusters allows our ROV to be faster and more maneuverable

Dual Action Manipulator Arm

Double servo gripper enables our manipulator arm to open, close, and roll 90 degrees

Onboard Electronics Enclosure Featuring RS485 Module

3" Blue Robotics watertight enclosure to house electronics onboard the ROV, reducing signal interference and voltage drop through the tether

Image Recognition Capability

Software programmed to autonomously identify benthic species

Temperature Sensor with LCD Display

Measures and records water temperature in South Fork Holston Lake

Safety Features

Motor shrouds with thruster guards, warning tape on shrouds, in-line fuses, kill switches, SOS leak sensors, strain reliefs, voltage regulators, no sharp edges

