

Stevens Institute of Technology



College Location: Hoboken, New Jersey

Distance to International Competition: 874 Miles

EMPLOYEES:

- Stephanie Senkevich
 - \odot Senior Mechanical Engineer
- Chris Stollen
 - O Senior Mechanical Engineer
- Kevin Grudzinski
 - Senior Mechanical Engineer
- Riaz Chowdhury
 - Senior Mechanical Engineer
- Woosung Lee
 - Senior Mechanical Engineer

ROV

- Approximate cost: \$1,000
- Primary Material = PVC





Spec Sheet:

- Chassis
 - o 1 in PVC
 - Unmodified air tight frame
 - o Modular skeleton
- Ballast Tanks
 - o Inner-tubes
 - Air actuator valves
 - Heavy-lift applicators only
- Thrusters
 - o Mount
 - Directionality
 - Modular locations
- Electronics
 - Wire Management
 - Tether clips
 - Pipe manifold wire organizer (water-proofing)
 - Tether design
 - o Electronics Enclosure
 - Lazer-cut mounting boards tray clips
 - Double o-ring seals
 - 6 inch clear acrylic
 - o Control
 - BeagleBone Black (commands)
 - 2x Sabertooth 2x12 motor controls (thrusters + actuator)
 - 3x Raspberry Pi's for vision (720p real-time video feeds with 1080p video recording)
 - Joystick control
 - o Software
 - Python
 - Joystick Controls
- Gripper
 - High strength linear actuator
 - Interchangeable claws
 - o 'pull-in' motion







