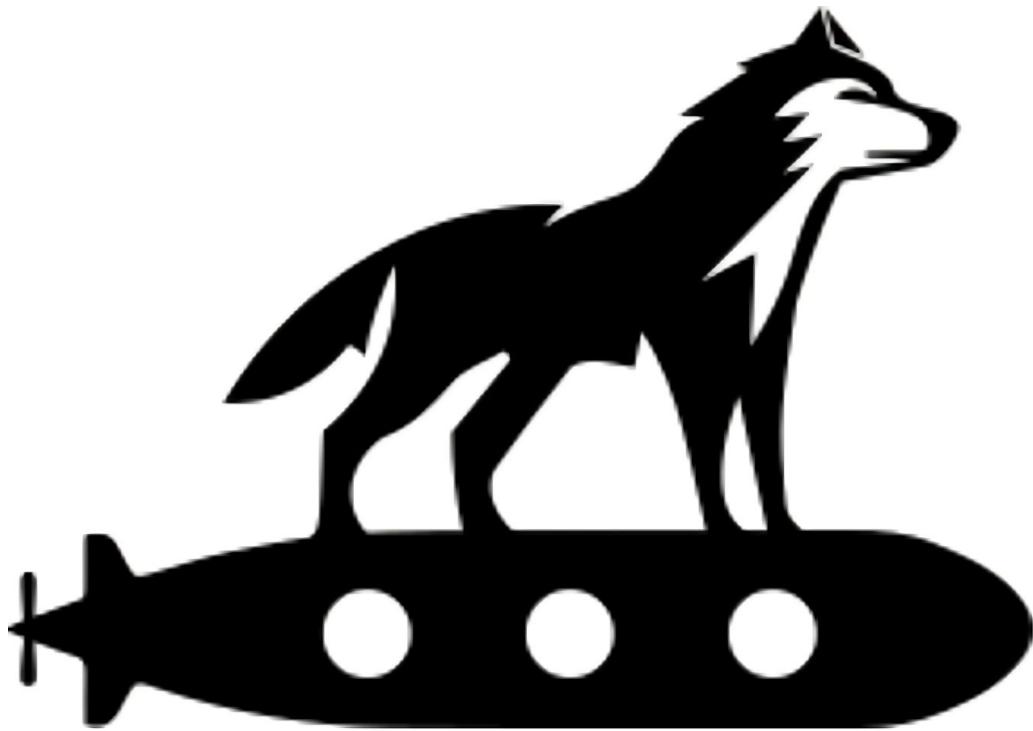


Industry Partners Program Packet



Aquapack Robotics

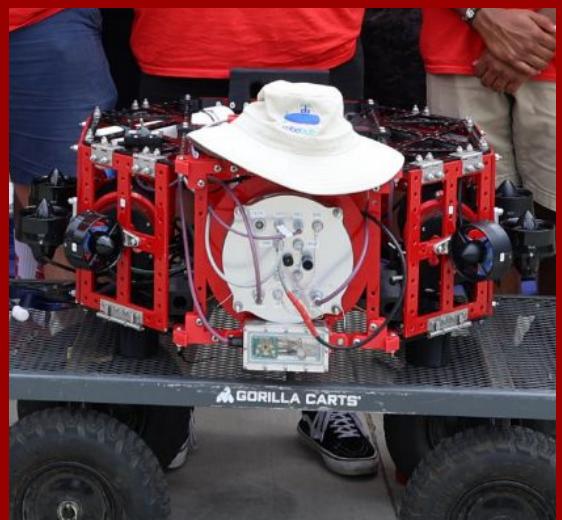
NC STATE UNIVERSITY

2025-2026

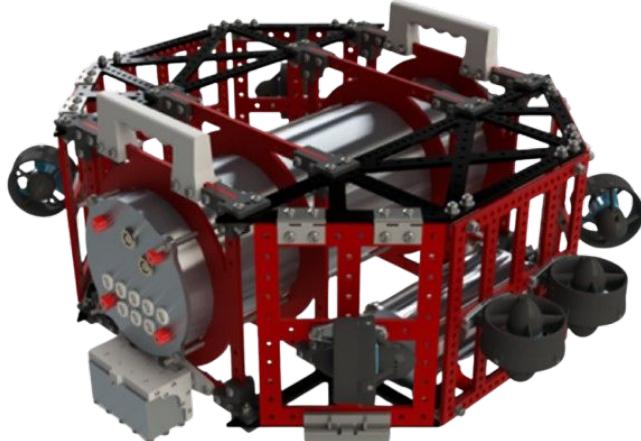
Our Mission



We are a student-run 501(c)3 non-profit organization that designs and builds autonomous underwater vehicles to compete at the annual [RoboSub Competition](#) against 55+ international teams. We pride ourselves on our community outreach and frequently host or table at events for K-12 students to share our knowledge and love for robots. Our organization comprises of 60+ undergraduate and graduate students and welcomes any NC State student with a passion for robotics.



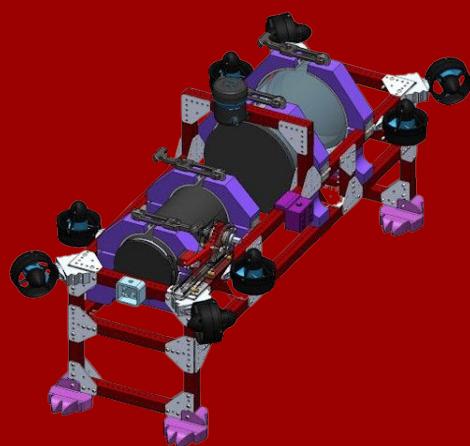
Our Story



SeaWolf VIII

AquaPack Robotics was founded in 2004 as 'The Underwater Robotics Club at NC State University' and competed in RoboSub for the first time in 2005.

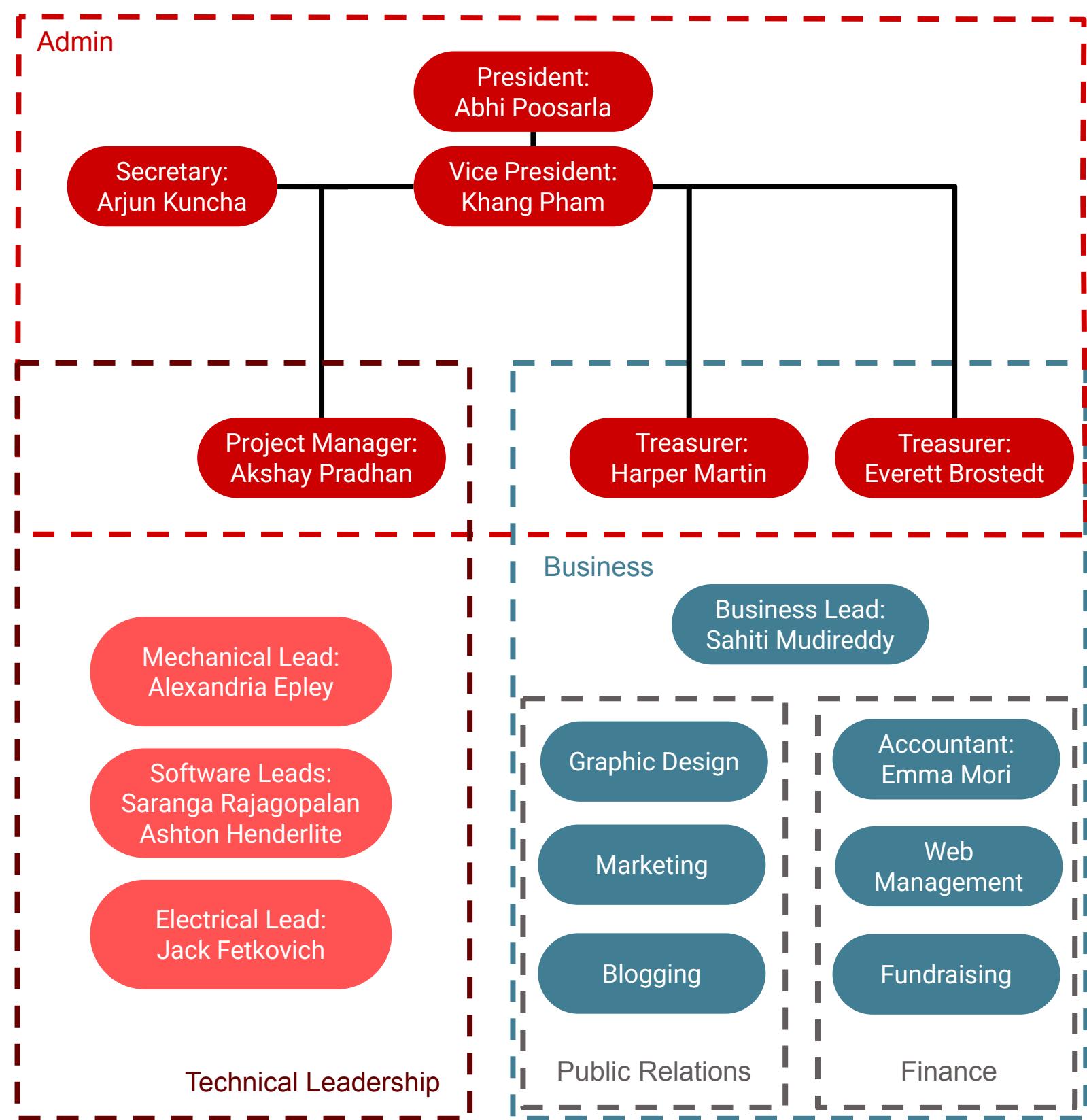
We have had 8 iterations in our robot line, with SeaWolf VIII being our 8th iteration. We are in the process of designing, constructing, and testing SeaWolf IX, which will be our next generation of competition robots.



SeaWolf IX

This past RoboSub competition, we placed 7th out of 58 teams in Design Documentation. We currently consist of 3 technical teams (electrical, software, and mechanical) and a business team which are collectively advised by Dr. John Muth, a distinguished professor in the ECE department at NC State.

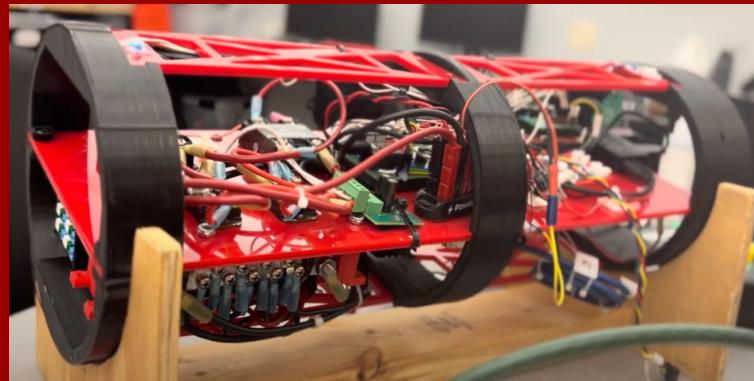
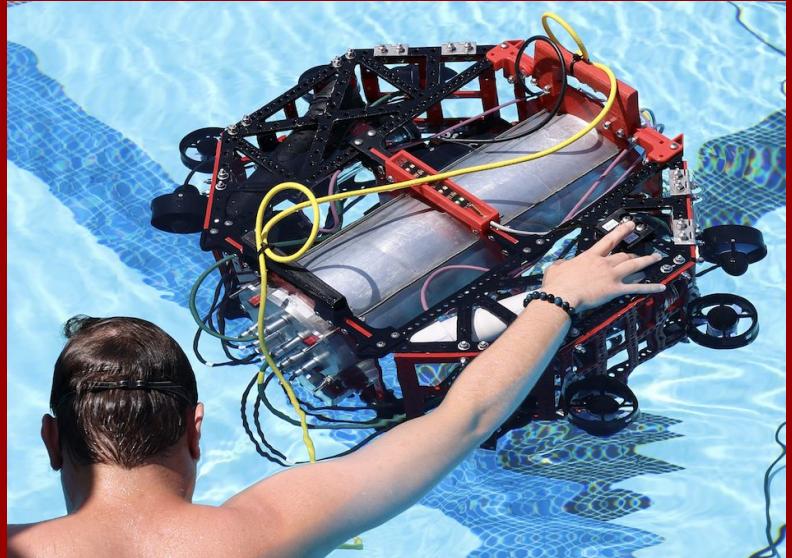
Organizational Structure



Our Subteams

Mechanical Team

- Finite Element Analysis
- Frame and Structural Support Design
- Waterproof Enclosures
- Actuation
- Electromechanical Systems
- Computer Aided Design (CAD)
- Buoyancy Calculations
- Robot Manipulators

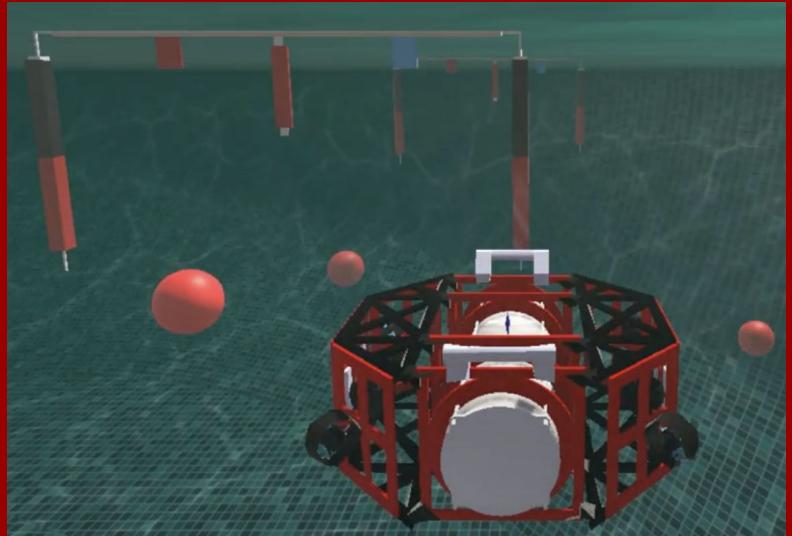


Electrical Team

- Power Distribution
- Printed Circuit Board Design
- Thruster Control Systems
- Embedded System Design and Programming
- Digital and Analog Signal Processing
- Acoustics Navigation

Software Team

- Computer Vision/Machine Learning
- Software Architecture
- Software Packaging
- Robot Simulation
- User Interface
- System Communication



Notable Achievements

**7th Place
in Design
Documentation**

2025 RoboSub

**9th Place
Autonomy
Challenge**

2024 RoboSub

**2nd Place
Technical
Design Report**

2024 RoboSub

**TDR published in the
Sept. edition of the
2024 Naval
Engineers Journal**

**2nd Place in
Team Video**

2025 RoboSub

**2nd Place in
Design Strategy
Presentation**

2025 RoboSub

Ranking History

RoboSub 2025

- ❑ 27th out of 58 Overall
- ❑ 27th out of 58 in Autonomy Challenge
- ❑ 7th out of 58 in Design Documentation
 - ❑ 2nd in Design Strategy Presentation
 - ❑ 2nd in Team Video
 - ❑ 8th in Website
 - ❑ 11th in Technical Design Report
 - ❑ 23rd in System Assessment Presentation

RoboSub 2024

- ❑ 9th out of 41 Overall
- ❑ 9th out of 41 in Autonomy Challenge
- ❑ 13th out of 41 in Design Documentation
 - ❑ 2nd in Technical Design Report
 - ❑ 5th in Team Video
 - ❑ 9th in System Assessment Presentation
 - ❑ 13th in Design Presentation
 - ❑ Recipient of City of Irvine Award for Teamwork

RoboSub 2023

- ❑ 14th out of 35 Overall
- ❑ 13th out of 35 in Autonomy Challenge
- ❑ 15th out of 35 in Design Documentation
 - ❑ 6th in Technical Design Report
 - ❑ 10th in Team Video
 - ❑ 10th in System Assessment

Industry Partners Program

The Industry Partners Program (IPP) was created by AquaPack Robotics to connect companies with our organization and with university students from other NC State engineering design teams. Our ultimate goal is to provide value for our members in the form of industry advice and connections and to allow industry leaders the opportunity to interact more with university students and utilize our organization as a recruitment pool. This program has aided our students in streamlining the process of getting internships and jobs.

Company Involvement

We invite our industry partners to hold talks and workshops with our members. In these talks, companies have the opportunity to schedule a recruiting event or an Engineering Tech Talk, where the following topics are typically discussed...

- What the industry is like
- Key skills to have to work at your company or in your field
- Positions your company is hiring
- Resume advice (Optional)
- Tech Talks



Benefits

In exchange for holding this event with us we will...

- Post a blog with pictures on our website
- Promote you as one of our Industry Partners on our website

Community Outreach and Representation

Fall 2025 Events

- First Lego League Bull City Scrimmage Showcase
- Student Involvement and College of Engineering Wolfpack Welcome Week
- POP Back at The Oval
- NC State Packapalooza
- Resume Workshop with ADI Inc.
- Sustainability Fair at NC State

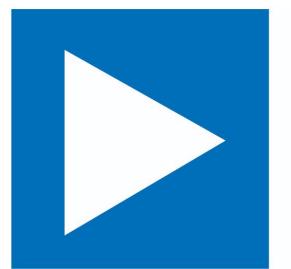


Future Events (Spring 2026-Summer 2026)

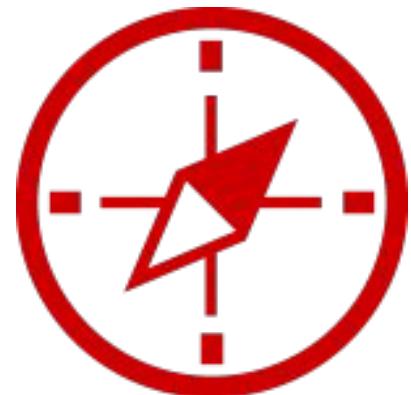
- FIRST Tech Challenge team advising
- College of Engineering Open House
- Nagoya University NC Visit
- NC Space Grant Symposium
- NCSSM Underwater Robotics Club mentoring
- Reedy Creek Middle School Outreach

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