# TARTAN AUTONOMOUS UNDERWATER VEHICLE

**CARNEGIE MELLON UNIVERSITY** 



2018 SPONSORSHIP PACKET

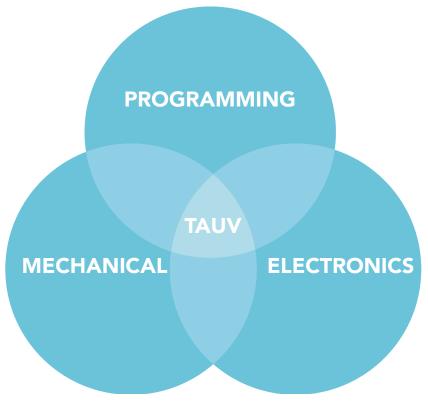
# **ABOUT US**

### The Team

Tartan Autonomous Underwater Vehicle (TAUV) is a newly founded interdisciplinary team of undergraduates at Carnegie Mellon University. TAUV designs, constructs, programs and tests an autonomous submarine to compete in the annual international RoboSub competition. Although small, out team is filled with passionate and dedicated students. We plan to officially compete in our first competition in August 2019.

### Competition Overview

The RoboSub competition is an annual international competition held in August with about 50 participating teams located in San Diego, CA. The objective is for each team to build an autonomous underwater vehicle to navigate the course and complete various tasks. The challenges include recognition of objects, launching torpedoes, tracking patterns, etc.



#### Fall 2018

The team was established in September 2018 and our mechanical and electrical team has begun designing our first vehicle. During this stage, all members will begin doing in-depth research into various system types and manufacturing methods. We aim to have a complete, ready to manufacture, CAD model by the end of the year. The software team will work on building our software stack and go through rigorous testing on the simulator. In addition, we have also been working on our team branding and working to develop a lasting community on the Carnegie Mellon Campus.

#### Spring 2019

During the Spring semester, we will begin manufacturing and testing our first automated underwater vehicle. We aim to have our first iteration manufactured by mid-February 2019. The software team will also begin doing water testing for controls and vision.

#### **Summer 2019**

During the summer of 2019, we will officially participate in our first Robosub competition.

#### **Looking Forward**

For upcoming years, our priority will be to establish our team's presence both in the RoboSub and Carnegie Mellon communities. We also plan on workshopping outreach activities to get more people involved in STEM.

# **BUDGET**

### Below is our budget for the upcoming year:

#### **Expenses**

Thrusters	\$1200
Submarine Frame	\$500
Electrical Boards	\$1500
Waterproof Enclosure	\$600
Cameras	\$1000
Sensors	\$4000
Miscellaneous Electronics	\$1000
Competition Fees	\$1000
Team Apparel	\$200
Total	\$11000

#### **Income**

Sponsor Donations
Independent Fundraising
University Funding
Team Dues

## **SPONSORSHIP**

As a team, we depend on the generous support of various sponsors to manufacture our autonomous underwater vehicle. By sponsoring TAUV, you will be supporting an up and rising engineering effort. The donations that we receive allow us to construct and modify our autonomous underwater vehicle for competitions. The majority of donations will fund the essential mechanical and electrical parts needed to construct a well-rounded vehicle. TAUV graciously welcomes both monetary and in kind donations. All donations will go to purchasing various hardware parts. The remaining funds will be funneled into community outreach.

Having a transparent process is important to us, so we will be sending out monthly updates on the progress of the team to all our sponsors. Sponsors will also receive additional benefits from the team depending on the magnitude of their donation. Please see below for more information.

**Packages** 

- Organization name on official team publications
- Info-session hosting with team

GOLDFISH

\$100 - \$500

- Small organization logo on team appare
- Access to resume books
- Organization name on official team publications
- Info-session hosting with team

SAILFISH

\$500 - \$1000

- Small organization logo on team website
- Medium organization logo on team apparel
- Small organization logo on team submarine
- Access to resume books
- Organizatiton name on official team publications
- Priority for info-session hosting with team

DOLPHIN

\$1000 - \$2500

- Large organization logo on team website
- Large organization logo on team apparel
- Large organization logo on team submarine
- Custom team plaque
- Access to resume books
- Organization name on official team publications
- Priority for info-session hosting with team

GREAT WHITE \$2500+

