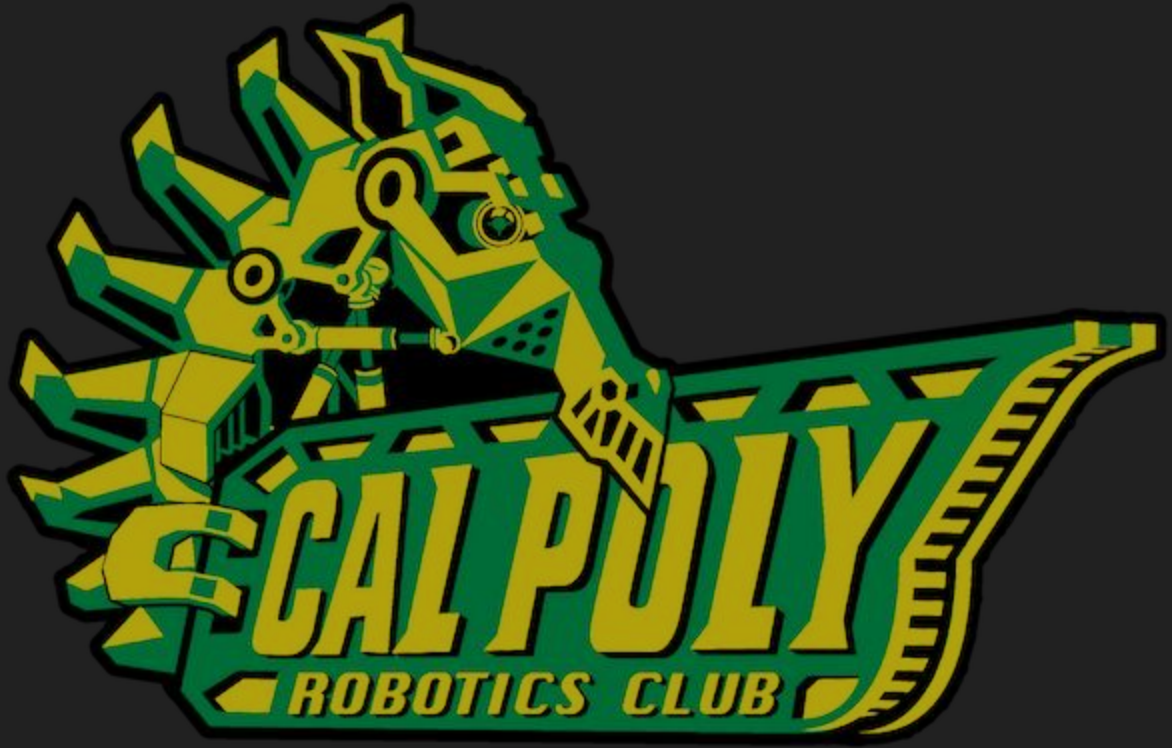

CAL POLY
ROBOTICS CLUB

About Us

We are a project-based multidisciplinary club focused on exploring robotics by building creations from our wildest imaginations. Our projects focus on solving complex engineering problems while teaching students the fundamental principles and practices within engineering. All majors are welcome, and no experience is required.

Our Projects

Some of our flagship projects include the underwater remotely operated vehicle, a functional life-size replica of the Star Wars BB-8 droid, and an autonomous golf cart. With a mixture of competition based and non-competition based projects, we currently fund a total of eight different projects, but are always accepting proposals for new projects to fund!

Autonomous Golf Cart (IGVC)

Goal:

- Retrofit a golf cart with all the sensors and motors necessary to autonomously navigate around campus.

Opportunities:

- Work with sensors such as LIDAR, IMU, GPS, and Stereo Vision Cameras.

- Learn about Computer Vision, Motion Planning, SLAM, Board Design, Firmware.

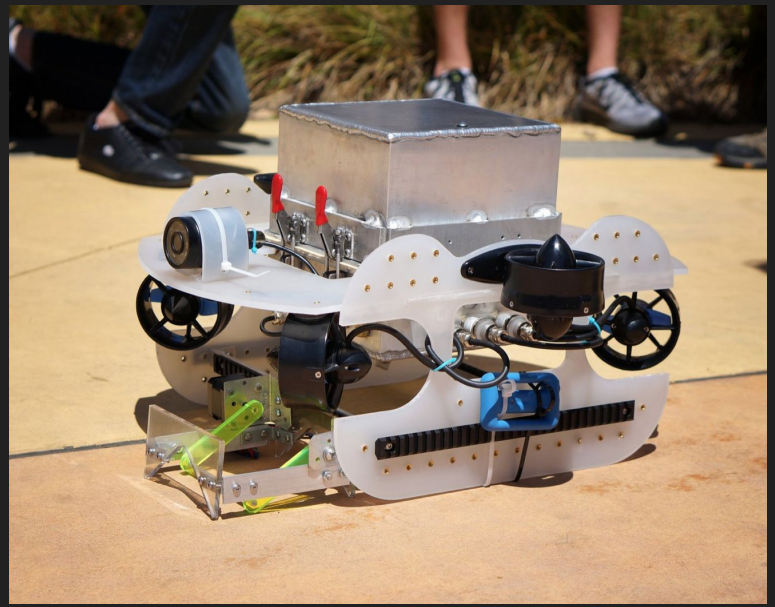
UROV

Goal:

- Build an underwater remotely operated vehicle for both competition and research in aquatic environments.

Opportunities:

- Circuit Design and Manufacturing
- Software and Firmware Development
- CADing/Prototyping/Machining Mission Tools



RoboCup

Goal:

- Build a small fleet of autonomous soccer playing robots to compete in the RoboCup competition.

Opportunities:

- Learn about Mechanical Design, Machining, Board Design, Machine Learning, Multi-Robot Systems.

Mech Warfare

Goal:

- Build a robot to compete in the Robogames Mech Warfare Competition in which walking robots engage in a simulated battle in a model city.

Opportunities:

- Learn about Mechanical Design, Prototyping, Software Development.

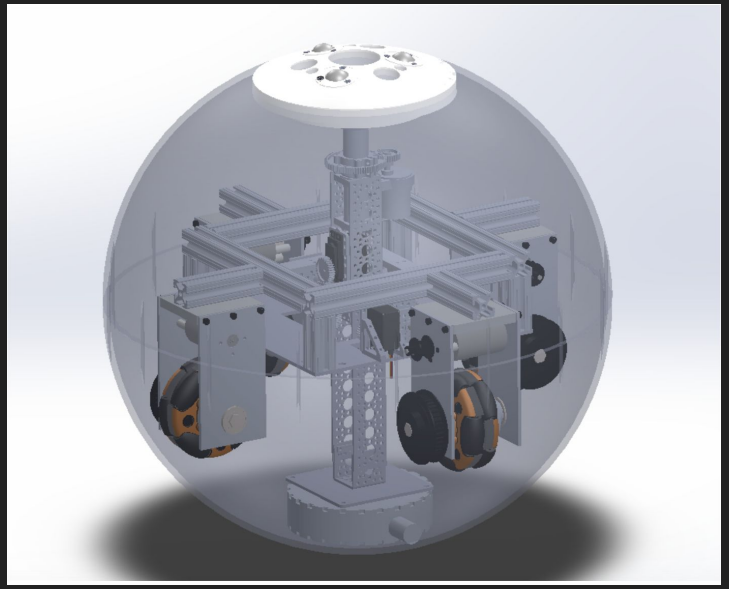
BB-8

Goal:

- Create a functioning replica of the famous BB-8 droid from Star Wars with as many degrees of freedom as possible.

Opportunities:

- Learn about Mechanical Design, Machining, Controls.



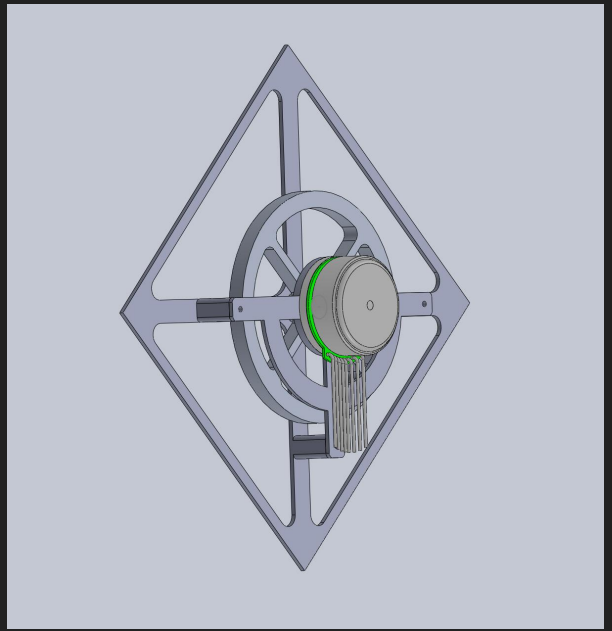
Cubli

Goal:

- Build a 2-D “Cubli” that can jump up and maintain balance on its corner by converting the angular momentum of spinning gyroscopic reaction wheels to angular momentum of the entire system.

Opportunities:

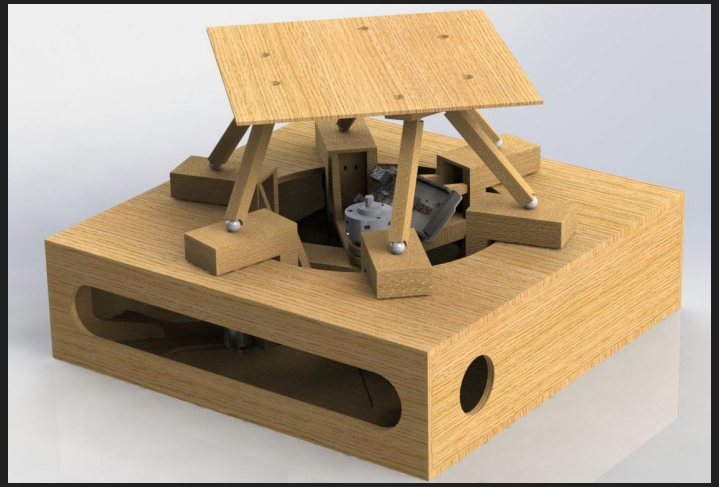
- Learn about Mechanical Design, Machining, Controls, Embedded Systems.



Stewart Platform

Goal:

- Design and build a stewart platform, which is a device commonly used to precisely control large objects such as airplane simulators.



Opportunities:

- Learn about Mechanical Design, Laser Cutting, and Basic Electronics.

Contact Us

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