



Sponsorship Information

2026-2027

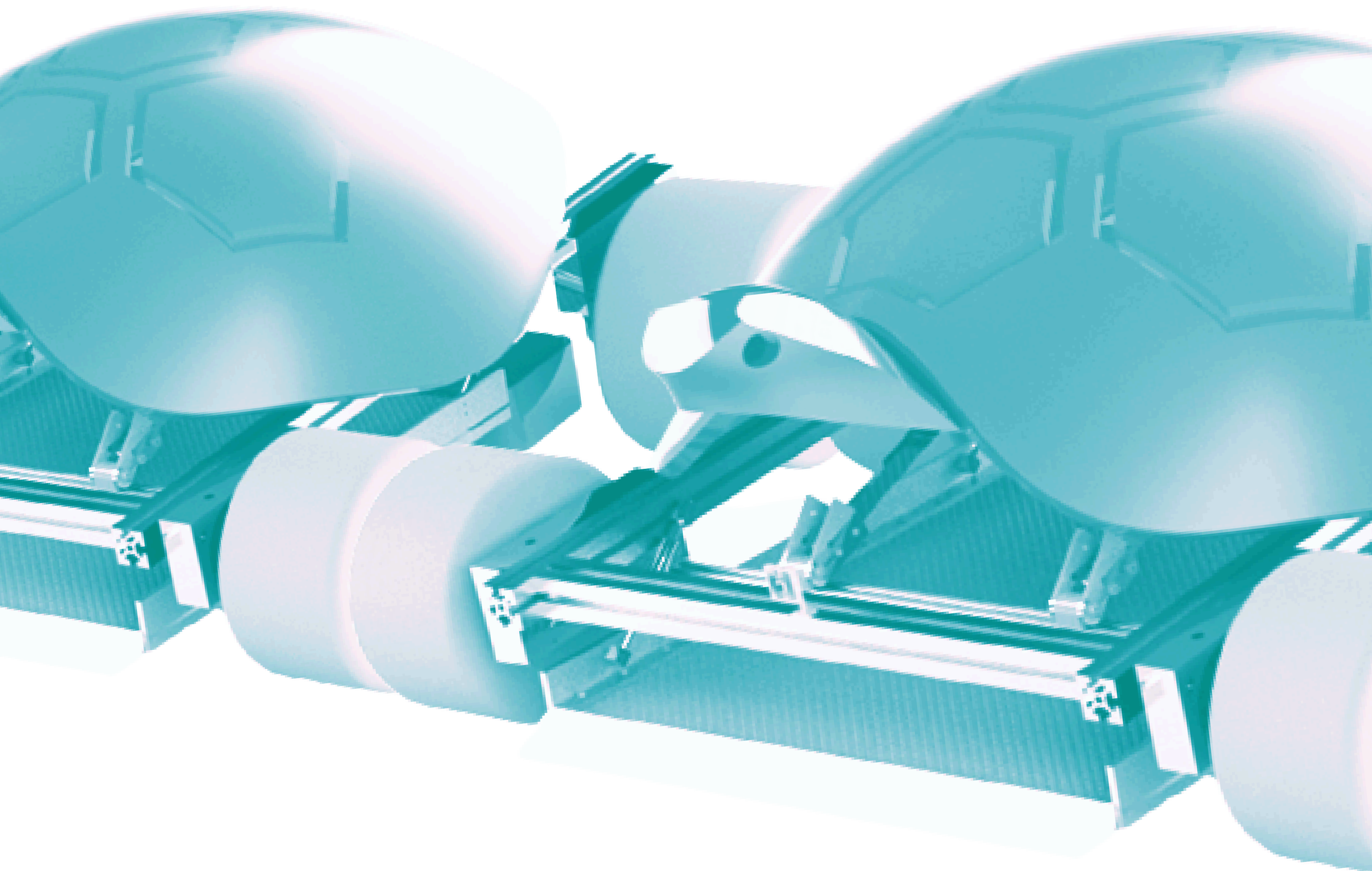




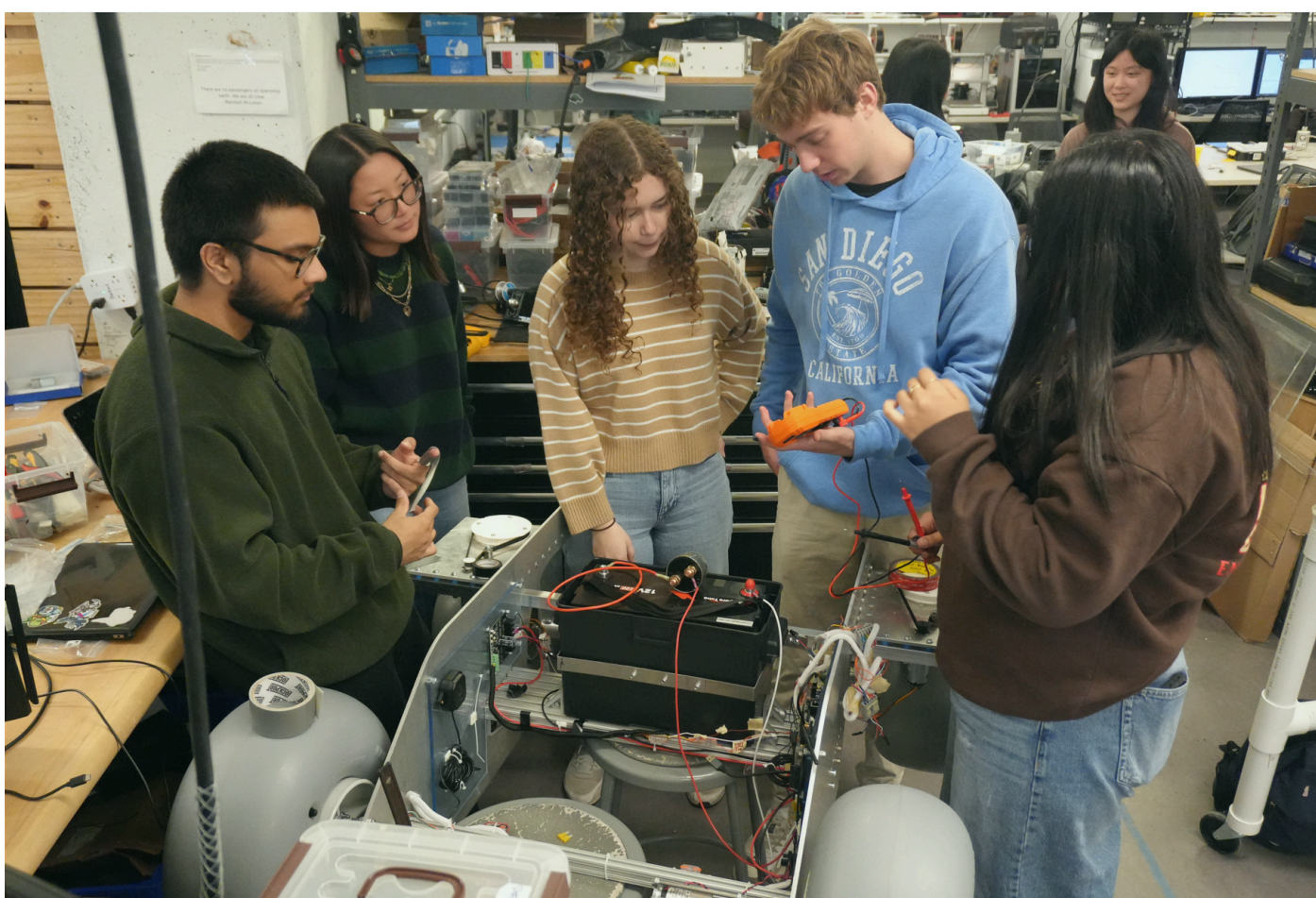
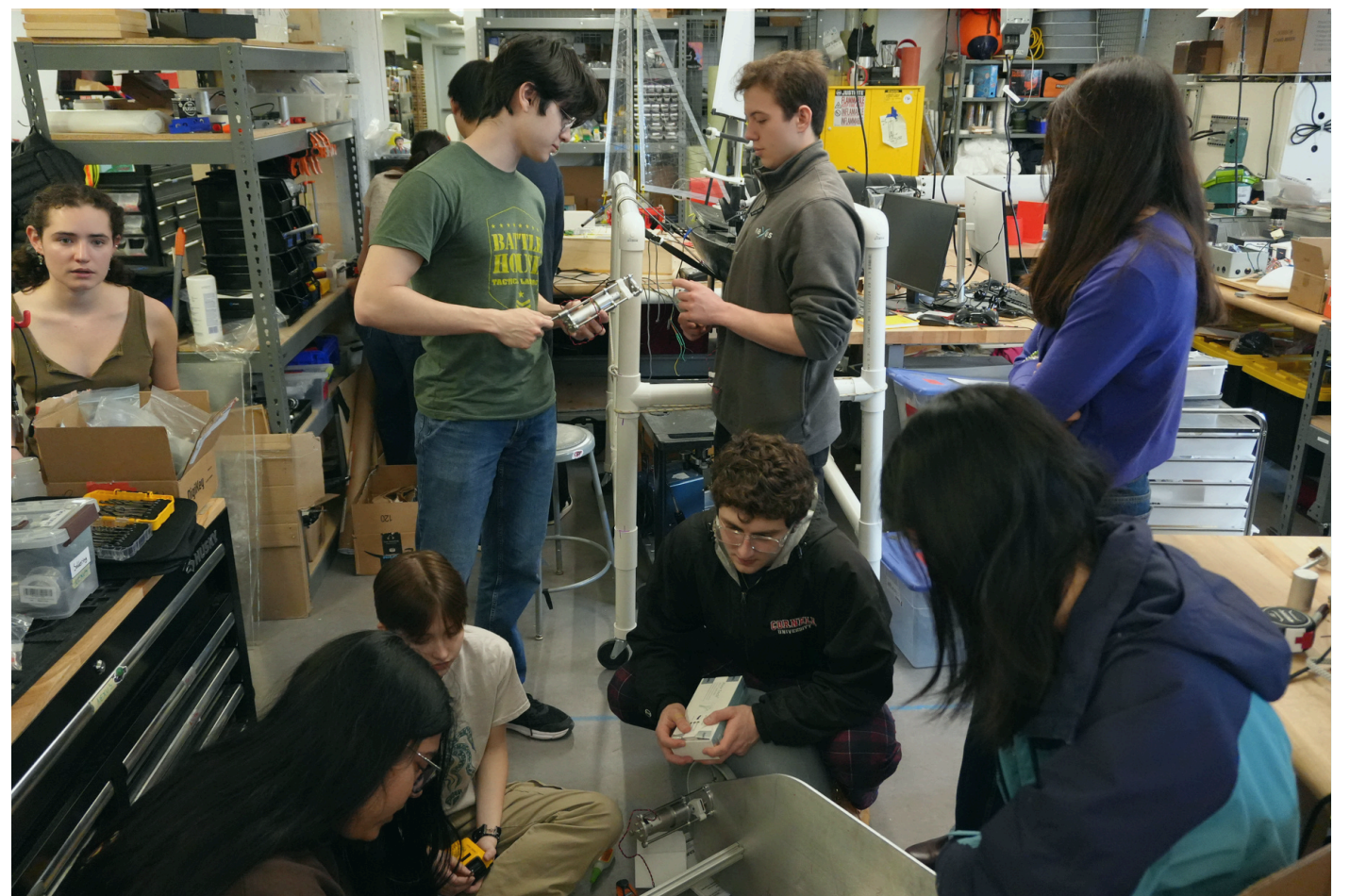
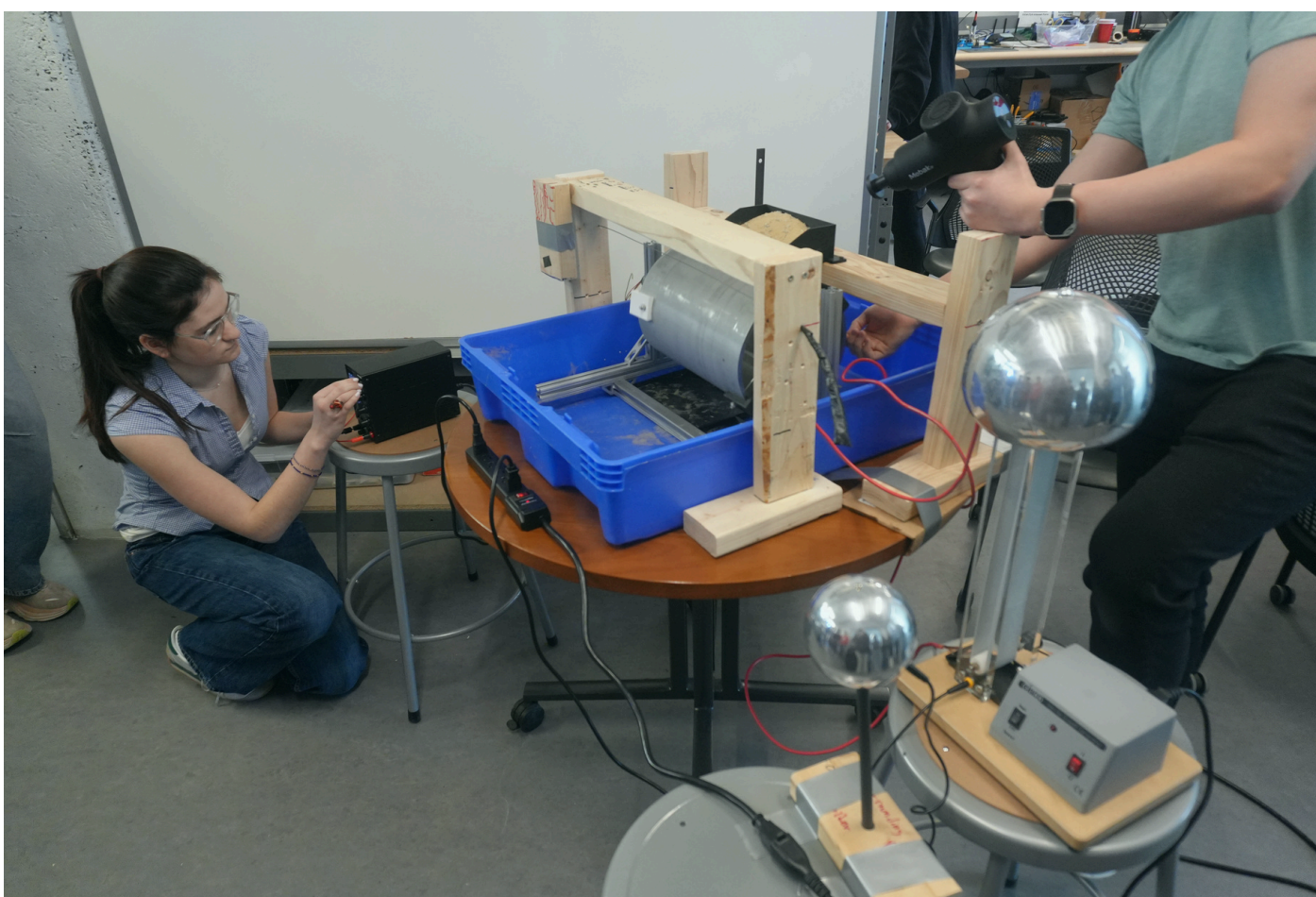
TABLE OF CONTENTS

3	About Us
4	The Plastic Pollution Crisis
5	Meet Honu – The Turtle Robot
6	Our Progress in 2026
7	Why Support?
8	Member Placement
9	Sponsorship Opportunities
10	Contact Us

ABOUT US

Cornell Nexus is a diverse team of environmentally-driven students **building an autonomous, solar-powered robot designed to remove microplastics from beach shores**. United by a passion for leveraging technology to tackle pressing environmental issues, we aim to transform academic knowledge into tangible, sustainable solutions that leave lasting impacts in our communities and beyond.

With members representing every college at Cornell, we think like researchers, build like engineers, and execute like entrepreneurs. As a team, we value ingenuity, collaboration, and persistence. Each of our four sub-teams contributes to every stage of the design process, working together to construct a cohesive and effective robot.



With the support of sponsors, we are not only **advancing future of sustainable technology but also empowering the next generation to make meaningful change**.

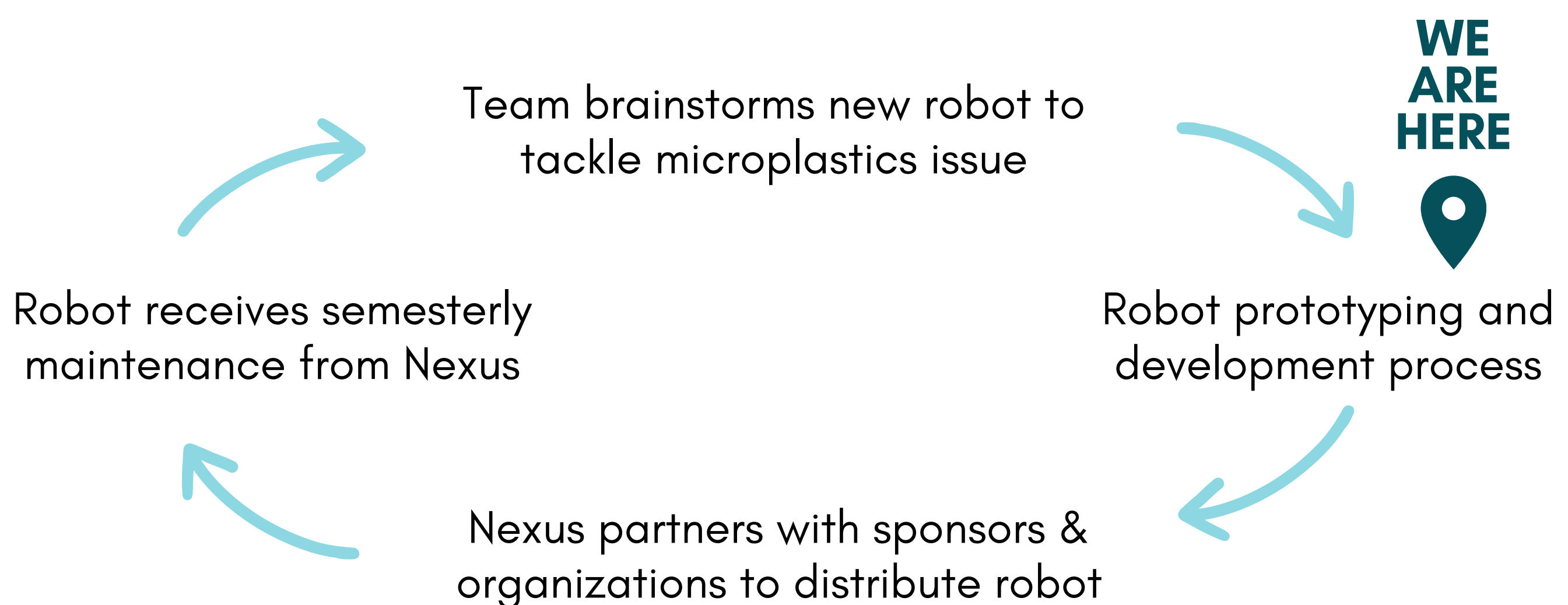
THE PLASTIC POLLUTION CRISIS

Our beaches are polluted—plastic bottles and pieces of trash are scattered everywhere. However, this is only the portion of pollution we can see. In reality, there are over **200 trillion pieces of microplastics** contaminating the sand, oceans, rivers, and even our drinking water. They mix with the sand, making them almost impossible to remove. These buried microplastic particles disrupt ecosystems and harm both wildlife and human life. The plastic pollution crisis is a deep and oftentimes invisible issue that is decimating life as we know it.

OUR SOLUTION

Cornell Nexus' autonomous, solar-powered robot that filters out microplastics from beach sand aims to provide an innovative solution to a growing environmental crisis. The autonomous robot utilizes various mechanical filtration stacks and adaptable energy sources to identify and remove microplastics in any condition. We are redefining the impact that Cornell students can make to solve the plastic pollution crisis.

Cornell Nexus' final goal is to have a fully-functioning autonomous robot that can be distributed to various organizations for beach clean-ups. This distribution will allow us to extend the impact of our technology at a quicker rate and at larger scale.



MEET: HONU - THE TURTLE ROBOT

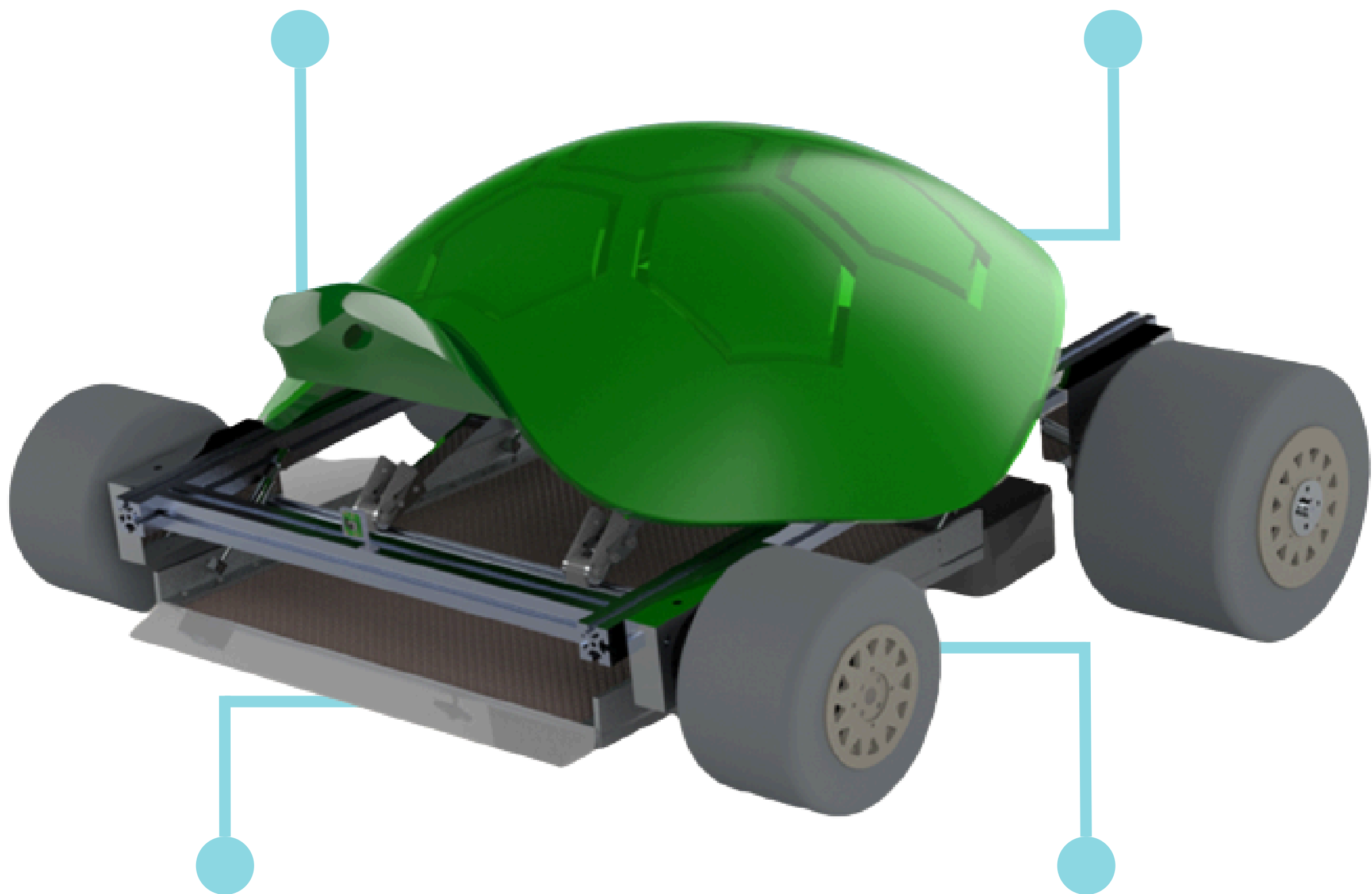
Autonomously Cleaning Microplastics from Beaches

Autonomous Movement

Our unique autonomous system and traversal algorithm detects beach obstacles and doesn't need to be controlled live, allowing for 24/7 operation

Computer Vision

Honu docks precisely into its base station to deposit plastics and recharge, using computer vision and front & back cameras to see 360°



Filtration Stack

Honu's novel filtration stack is specifically designed by our team to filter microplastics too small for other cleanup methods to identify

Powered Sustainably

The base station charges Honu's battery using power from solar panels and a wind turbine, ensuring the robot can work in any weather

OUR PROGRESS IN 2026

Our team consists of 60 members organized into four subteams with each team working on specialized aspects of the robot.

Software

The software subteam **develops the autonomous algorithm for our robot**, which determines how the robot will travel and interact with the environment.

PROGRESS: Members are working on **autonomous navigation** using LiDAR technology and depth-sensing cameras. This will help Honu avoid obstacles and reach the docking station for charging.

Electrical

The electrical subteam **designs and implements the electrical system of our robot and base station** which includes sensor setups and communication systems.

PROGRESS: Members are working on **designing custom PCBs** to optimize motor performance. The team is also working on rewiring the rover for greater reliability and integrating a **charging system and port**.

Mechanical

The mechanical subteam **develops an autonomous vehicle framework capable of operating on a beach setting**, including the microplastic filtration mechanism.

PROGRESS: Members are **finalizing CAD designs for the chassis, intake system, and intake subsystems**. The team is also working on **reducing weight and axle loads by using cheaper motors, designing mounts, and researching a new spiral elevator intake system**.

Business

The business subteam **handles overall team logistics**, which includes managing finances, assisting in internal operations, and marketing the organization.

PROGRESS: Members are working on implementing **new project documentation methods, organize fundraising, and lead new member recruitment** for the full team.

WHY SUPPORT US?

Further Your Mission



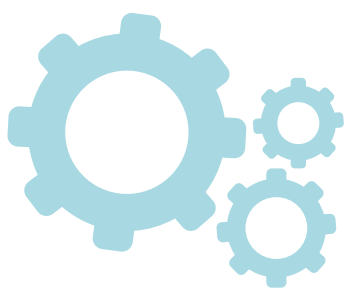
ESG creates value for companies as investors today consider how socially responsible the organization is and helps develop corporate culture. The core of our mission is precisely innovating for environmental sustainability.

On-Campus Publicity



We have a strong on-campus presence and are expanding our presence globally. As a sponsor, your company logo will be displayed on our materials such as merchandise, website, robot, and more.

Develop Talent



We provide training in essential engineering skills including CAD, circuit design, and computational programming. Our projects are also great applications of concepts from the classroom which develops talent fit to excel anywhere.



MEMBER PLACEMENT

Many of our members go on to successfully secure internships and full-time roles at leading companies across engineering, consulting, and tech.

McKinsey
& Company

GUGGENHEIM

millennium

SPACEX



Deloitte.



Johnson & Johnson

J.P.Morgan



LinkedIn



Google



TESLA

IBM



INTUIT



SPONSORSHIP OPPORTUNITIES

Thank you for helping support our mission!

\$50+

Turtle Package

Impact: Allows us to purchase workshop tools & Machine Shop training for new members

Benefits:

- Resume Book
- Logo on Nexus website

\$100+

Penguin Package

Impact: Allows us to purchase filtration mesh & solar panels for our charging base station

Benefits:

- All benefits of Turtle Package
- Social media posts

\$150+

Whale Package

Impact: Allows us to purchase high-tech tools such as RGB-D cameras and drivetrain motors

Benefits:

- All benefits of Penguin Package
- Logo on robot
- Advertising at recruitment events

\$1000+

Shark Package

Impact: Allows us to purchase advanced sensors, custom parts & design software

Benefits:

- All benefits of Whale Package
- Hosting of company info session
- Priority scheduling of additional events
- Promotional space on monthly newsletter

OUR SPONSORS



CONTACT US

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We also appreciate in-kind donations such as software packages (Solidworks, ANSYS), 3D printing services, CNC services, solar panels, batteries, IR sensors, miscellaneous parts, etc.

Thank you for helping us clean up our planet!