Contact:
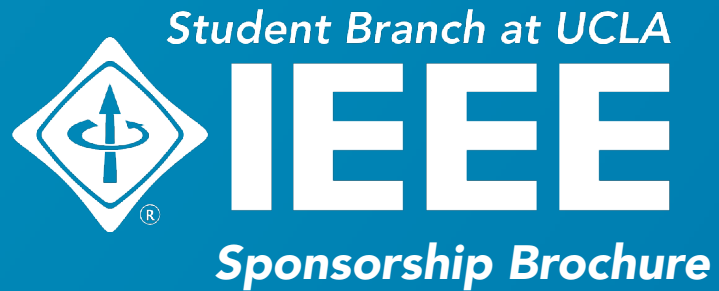
56-125 Engineering IV UCLA
420 Westwood Plaza
Los Angeles, CA 90095

ieeebruins.com

president@ieeebruins.com

Student Branch at UCLA

IEEE

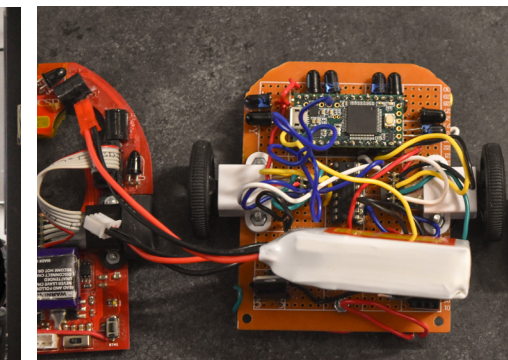## Sponsorship Brochure

Advancing Technology for Humanity

IEEE at UCLA

Table of Contents

Overview

As the student chapter of the Institute of Electrical and Electronics Engineers at UCLA, we believe in shaping engineers that solve problems for humanity. We help create better engineers by giving them the opportunity to gain hands-on experience in our lab, a network of close-knit electrical engineering and computer science majors and an opportunity for communication when working in teams on collaborative projects.

Membership in each of our programs is increasing across the board, making space and funding a concern for us to continue to accept engineers into our projects-focused club. We are also continually looking to increase resources in the lab and put on more workshops and networking events such as company tours. In addition to our academic and professional focuses, we build and maintain a strong community of learning
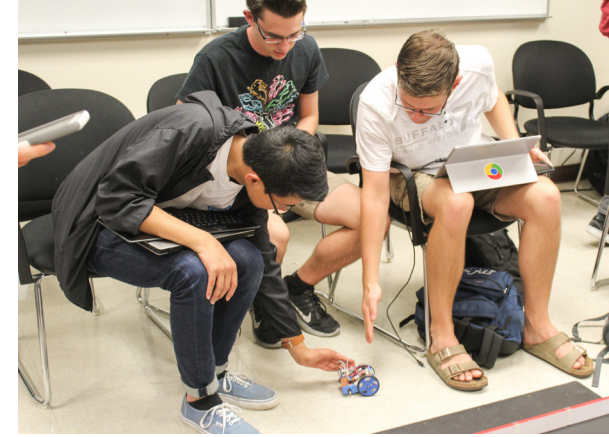
Projects

Open Project Space
OPS

Micromouse
MM

Aircopter Project
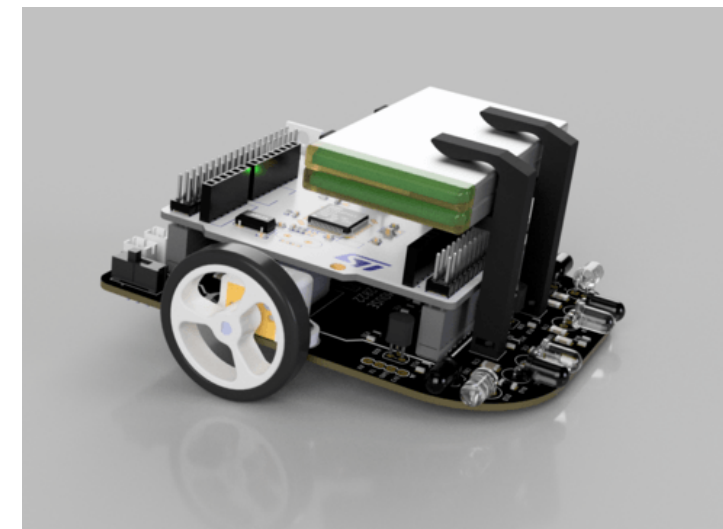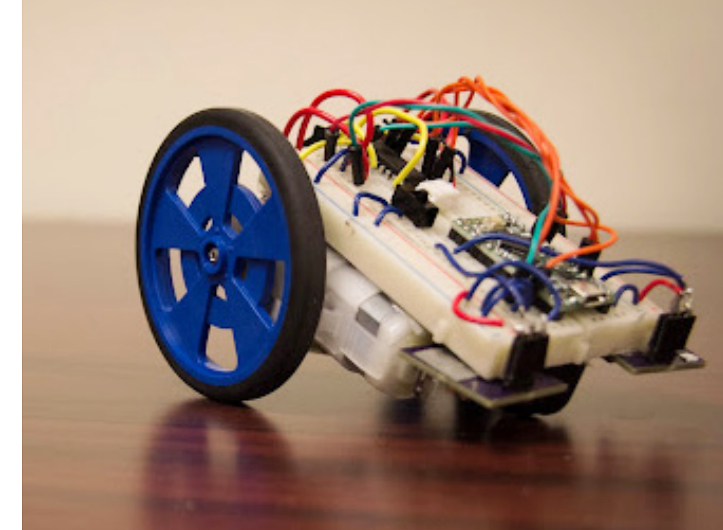*AP*

Digital Audio Visualizer
DAV

Wireless, RF, and Analog Project
WRAP

Open Project Space

Open Project Space (OPS) is a year-long program that continues to provide first and second year engineering students with hands-on experience in electronics. These projects cover topics ranging from basic circuits to CAD design of PCBs. The skills obtained from OPS are intended to prepare members to participate in more intensive programs, such as Micromouse and Aircopter Project.
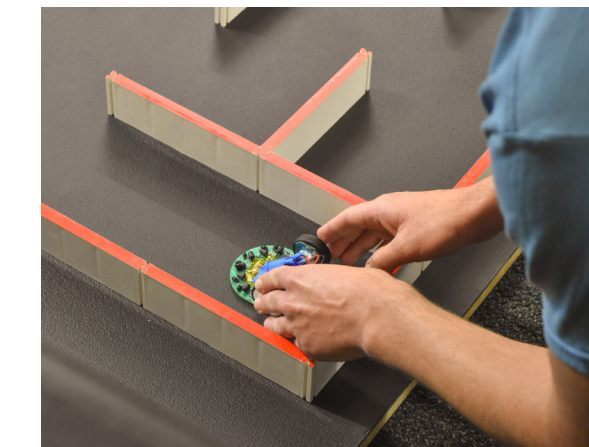
Over the past few years, OPS has received roughly 100 student applicants every year. However, due to financial and space constraints, we are able to accept only a fraction of applicants. Pushed by the UCLA Electrical and Computer Engineering Department, we are looking to secure more space and funding for the OPS program to accept as many students as possible.

Micromouse

IEEE at UCLA's longest established advanced project, Micromouse, challenges students to develop their skills in circuit design, sensor data acquisition, signal processing, control systems, and algorithms in order to create a maze solving robot. Over the school year, teams design, build, and program small autonomous robots and use them to navigate and solve a 16X16 cell maze. Teams compete for the fastest time by combining search and speed runs.

We held the annual All-American Micromouse Competition (AAMC) virtually this past year, and plan on holding it in-person this coming spring. Student mentorship and returner participation were successful this past year, and will be instrumental in the coming year. In addition, the program will increase focus on control systems and maze solving algorithms to optimize competition.
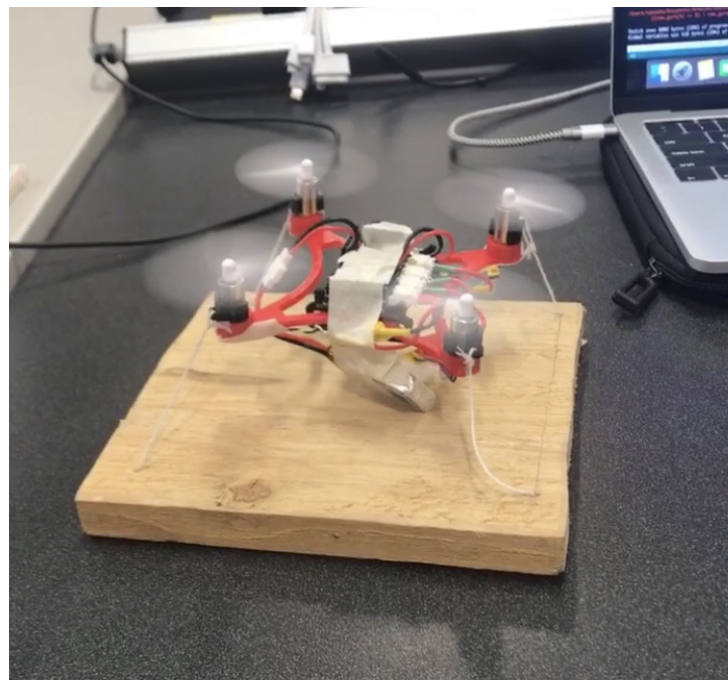
"

By involving our members in projects, we teach them hands-on engineering and teamwork skills.

"

Aircopter Project

Our Aircopter Project aims to teach members about more advanced topics, such as communication protocols, sensor data utilization, circuit design, and feedback control. Members learn these topics through project lectures and through practical experience as they design and build quadcopters.

This year, the Aircopter program will speed up their project schedule to increase the number of teams that achieve lift. The program will also create quadcopters that fly with more stability and reliability than ever before.
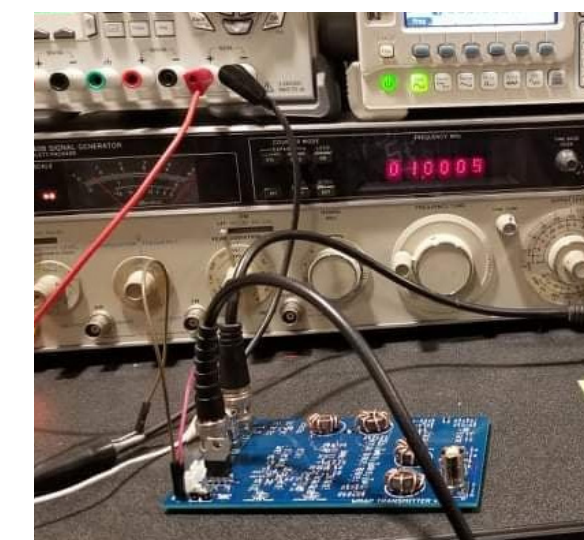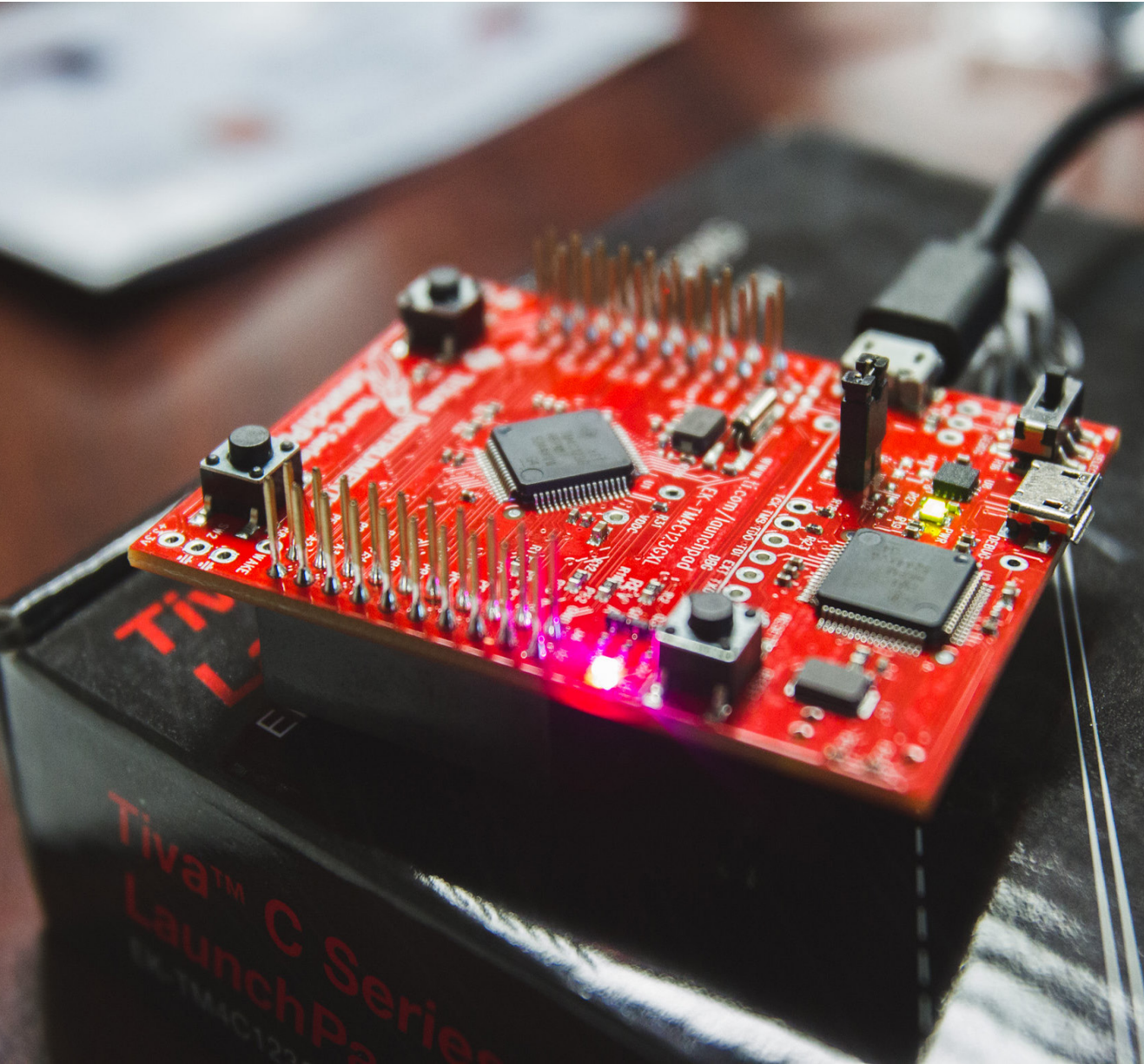
Wireless, RF, and Analog Project

WRAP is an advanced project focused on wireless digital communications and RF circuits. WRAP teaches students a variety of circuits topics used in wireless transceiver design, including amplifiers, mixers, and oscillators. On the signal processing side, WRAP covers the fundamentals of digital communication, digital filtering, and other techniques used in real-world communication systems. As the year progresses, students use this knowledge to design, build, and test their own physical wireless transceivers.

Digital Audio Visualizer

DAV bridges the gap between hardware and software. We'll be teaching members about digital logic concepts, digital signal processing techniques, and the FPGA design process. By the end of the year, members will create a device that can calculate and visualize the frequencies of audio signals using an FPGA.

Student Project Initiative

Aside from the five major projects that have been established curriculum at IEEE at UCLA, there is another opportunity for students to obtain hands-on experience in projects with the Student Project Initiative (SPI). Inherently, the organization encourages individuals to follow their curiosity and intuition to go above and beyond what is required of them in coursework. Therefore, students with a realistic idea can obtain funding from IEEE at UCLA for their own independent projects to allow them to purchase parts they need for their idea to come to fruition.

Workshops

IEEE at UCLA hosts a series of workshops every year, open to all UCLA students, both engineering and non-engineering. Each workshop focuses on a particular skill related to the field of electrical engineering and consists of a short lecture and a hands-on activity. These workshops cover topics such as schematic and PCB layout, soldering, 3D printing and modeling and advance microcontroller programming. Participants are encouraged to interact with one another during the activity and are allowed to keep their finished projects.

General Board

General Board is our annual mentorship program. Every year, members of our officer board choose to lead a group of 3-5 general members for the rest of the academic year. Each GB decides on a a set of focuses for their group, chosen among technical projects, hosting socials and events, or professional development.

In addition, members of a GB get first-hand experience in what it's like to be an officer for this organization, which usually motivates higher club involvement in the future.
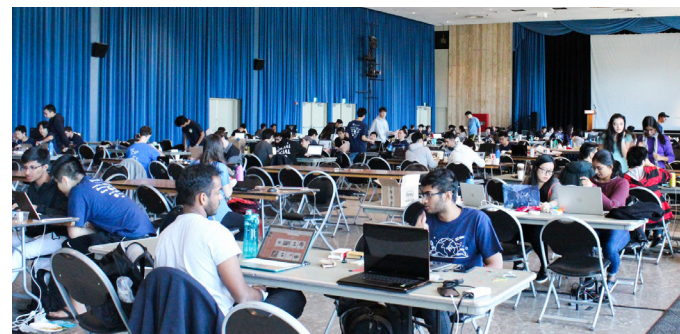
Events

IDEA Hacks
Hardware Hackathon

SPAve
Student Professional Awareness

Annual Banquet
Student Recognition

IDEA Hacks

This year, IEEE at UCLA, along with the UCLA Colony of Theta Tau, are once again pleased to present IDEA Hacks, one of the few college hackathons that provide an emphasis in hardware. At IDEA Hacks, we provide our hackers with tools, such as 3D printers, soldering stations, and other equipments free of charge. Not only will these hackers code, but they will also create tangible products from scratch in one weekend. Following last year's virtual hackathon success, we are hosting the event in-person this coming year to provide as many benefits as possible to the engineering community.

If you have any questions or wish to sponsor, please contact us at sponsor@ideahacks.la

SPAve

The Student Professional Awareness Venture (SPAve) is a day-long event that promotes professional development for our engineers. Students have the opportunity to attend skill-building workshops throughout the day, meet representatives from the industry, listen to high profile speakers, and more.

IEEE at UCLA hosts SPAve annually and aims for a cross-disciplinary theme. The purpose of this is to allow all engineering students to participate. We also extend an opportunity to your company to network with future engineers from UCLA.

Annual Banquet

The annual IEEE at UCLA Student Recognition and Alumni Banquet is established to celebrate and recognize the many accomplishments and successes that the IEEE at UCLA chapter, its members, the ECE department at UCLA, and our sponsors have made possible. We invite our top sponsors to dine with us as a token of our appreciation for their contributions to IEEE at UCLA. The banquet is also a chance to introduce and instate the new officers for the next year to our supporters.

Work Hard. Play Hard.

Our collaborative and friendly culture is the foundation of our organization. We further reinforce our culture by hosting quarterly events and socials meant to bring members closer together and form new friendships. Some of our favorite events are our Fall BBQ and our in-house ultimate frisbee tournaments!

Expenditures

General Meetings

General Meetings are held once per quarter (three times per year) to provide our members with general information regarding upcoming events and projects. General Meetings create an environment in which students can interact and socialize, while also serving as a platform for IEEE at UCLA officers and project leads to share information with members about upcoming opportunities and events.

Lab & Equipment

One of the main selling points to our engineers is that we have a relatively large lab space fully stocked with tools, passive elements, and other hardware components needed to create just about any project. We want our engineers to never worry about stocking the parts so that they can focus solely on their projects. With that being said, funding is the only way we can keep our lab fully stocked.

Sponsorship Tiers

		Silver *1000*	Gold *2000*	Platinum *4000*	Diamond *8000*
General	Representative banquet invitation			x	x
	Publicized Tech Talk				x
Recruiting	Recruiting post in newsletter	x	x	x	x
	Publicized recruiting event		x	x	x
	Resume Book			x	x
Branding	Logo on website	x	x	x	x
	Swag distributed in lab		x	x	x
	Logo in weekly newsletter			x	x
	Partnered with				x

If you have any questions or wish to sponsor, please contact us at corporate@ieeebruins.com. Our Corporate Relations Chair would be happy to answer any questions you have as well as negotiate any of the mentioned tiers.