

# IEEE STUDENT BRANCH AT UC SAN DIEGO

## Corporate Sponsorship Package

2020-2021

Official Email: [ieee@eng.ucsd.edu](mailto:ieee@eng.ucsd.edu)

Official Website: [ieeeucsd.org](http://ieeeucsd.org)

Facebook Page: [facebook.com/IEEEUCSD](https://facebook.com/IEEEUCSD)

# WHO ARE WE?

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IEEE at UC San Diego is a non-profit pre-professional student organization dedicated to providing engineering students with technical and professional development opportunities.

# WHY US?

## OUR MISSION

Promote creativity, sustainability, and diversity through technology at UCSD and in the greater San Diego.

## OUR COMMUNITY

- 2nd largest IEEE student branch in the US
- 9th nationally ranked engineering school
- 500+ Student members
- 1500+ event participation a year

## OUR OPPORTUNITIES

### Projects

- 4 Annual Projects (Micromouse/Grand PrIEEE/Robocup Soccer/Project Drive)
- 3 Quarterly Projects [150+ participants per quarter]
- DIY Company Projects
- Others: campus challenges

### Events

- H.A.R.D Hack
- Robofest & IEEE Day
- Reverse Career Fair
- Technical Workshops
- Professional Development Sessions
- Inclusive Socials

### Outreach

- Collaboration with 20+ high schools
- Hosted 100+ K-12 students in the past
- **Due to COVID, our events in this summer and fall are entirely online. However, we strive to connect and motivate our members through multiple remote**

## HOW CAN YOU HELP?

You can become a general sponsor or an inventory sponsor.

### 1. General Sponsor: through monetary donations for general operations

All general sponsors will receive the following benefits:

- Logo on IEEE website and weekly newsletters
- Tabling/Swag at GBM and other major events

### 2. Inventory Sponsor: through inventory donations/renting for specific events

All inventory sponsors will receive the following benefits:

- Logo on event advertising pages/shirts
- Tabling/Swag at major and sponsoring events

|   | Bronze | Silver | Gold | Diamond |
|---|--------|--------|------|---------|
| <b>Minimum Value*</b>   | 500    | 1000   | 2000 | 4000    |
| <b>Logo on Website/<br/>Newsletter</b>  | Yes    | Yes    | Yes  | Yes     |
| <b>Tabling/Swag at<br/>major events</b>   | Yes    | Yes    | Yes  | Yes     |
| <b>Access to resume<br/>database</b>  |        | Yes    | Yes  | Yes     |
| <b>Unlimited<br/>participation in<br/>technical<br/>workshops</b>                   |        |        | Yes  | Yes     |
| <b>Unlimited<br/>participation in<br/>professional<br/>development<br/>sessions</b> |        |        | Yes  | Yes     |
| <b>Unlimited<br/>participation in<br/>quarterly projects</b>                        |        |        |      | Yes     |
| <b>DIY events</b>   |        |        |      | Yes     |

\* Sponsorship value includes both monetary donations and inventory donations

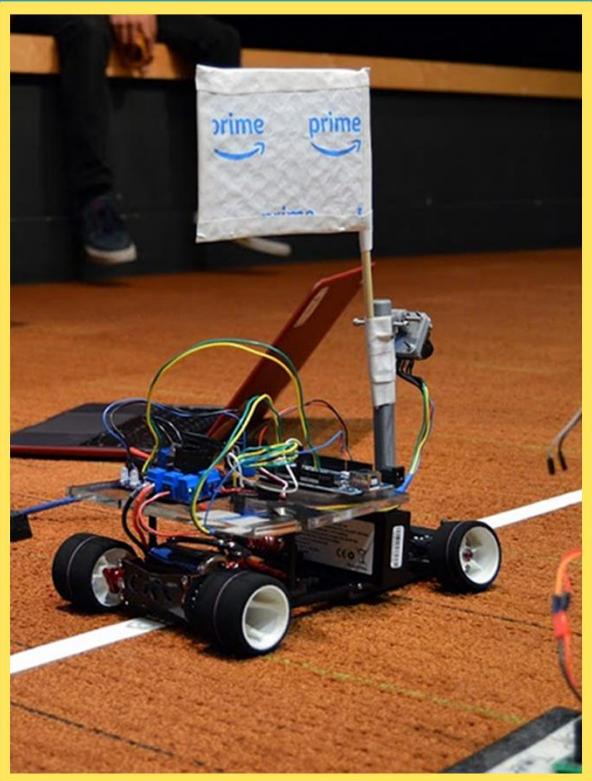
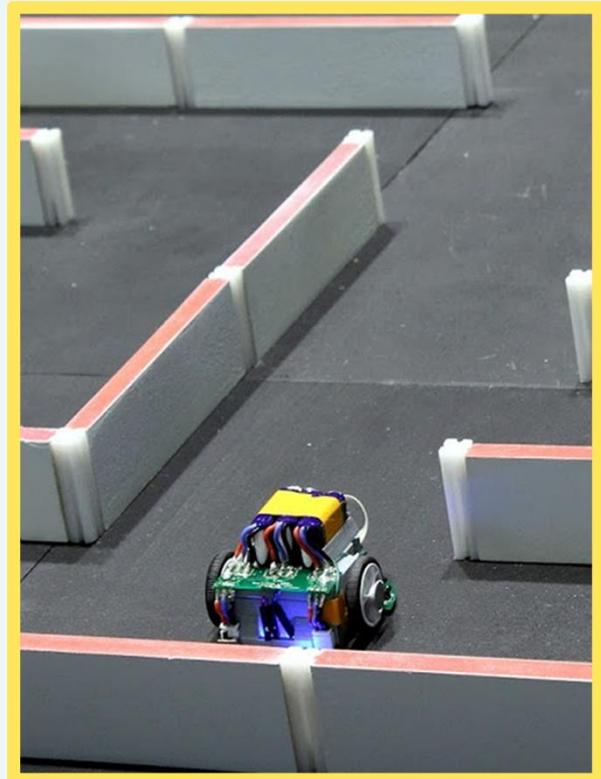
# ANNUAL PROJECTS

<http://ieeeucsd.org/pages/projects.html>

## MICROMOUSE

The Micromouse project challenges students to create autonomous robotic 'mice' programmed to solve a 16x16 cell maze by exploring and mapping the fastest route. Each year we sponsor roughly 40 UC San Diego students (~5 teams) to participate in our own competition called the California Micromouse Competition (CAMM).

Skills involved: EagleCAD, digital signal processing, surface mount soldering, programming microcontrollers, embedded programming for ARM processors and IC's, control theory, and advanced search algorithms.



## GRAND PRIEEE

The Grand PriEEE project challenges teams to design, build, and eventually race autonomous line-following vehicles. Each year we support at least 40 UC San Diego students (~5 teams) with mentorship and funding. At the end of the year, we host a competition during Robofest for our home teams and visiting schools, where each car attempts the same track, and the team with the best time wins.

Skills involved: circuit and PCB design, control theory, signal processing, and computer vision.

# ANNUAL PROJECTS

<http://ieeeucsd.org/pages/projects.html>



## PROJECT DRIVE

The Project Drive empowers students to build their own autonomous racing cars. The vehicles are expected to navigate themselves through an obstacle course in timed trials. Each year, we support a team of 6-10 people to compete at F1Tenth (formerly SparkfunAVC).

Skills involved: CAD design, signal processing, control theory, and computer vision.

## ROBOCUP SOCCER

Introduced by the RoboCup Federation in 1997, the Robocup Soccer project allows students to design, build, and test teams of fully autonomous robotic vehicles to play soccer with one another. We plan to host a showcase during our annual Robofest to present live soccer games, and hopefully establish an eligible team to compete in the RoboCup Small Size League.

More information can be found at <https://ssl.robocup.org/about>

Skills involved: mechanical design, circuit and PCB design, embedded systems, computer vision, machine learning, and robotics communication.

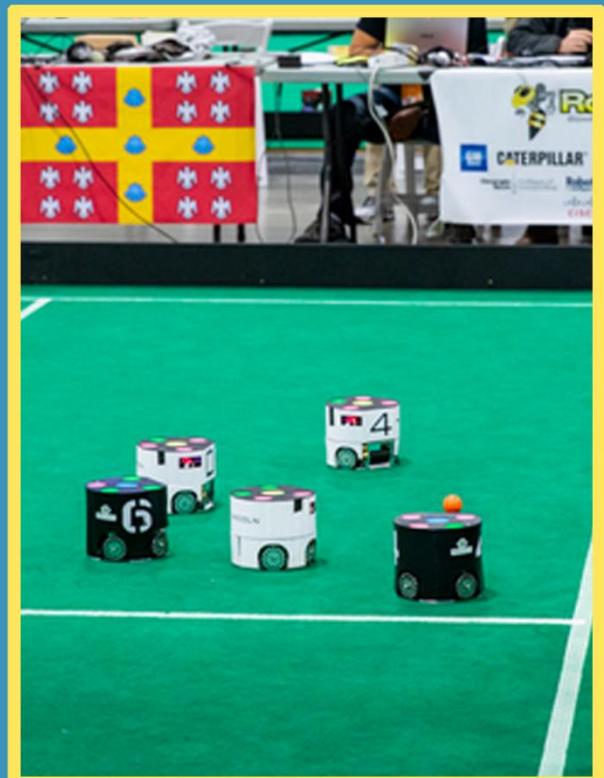
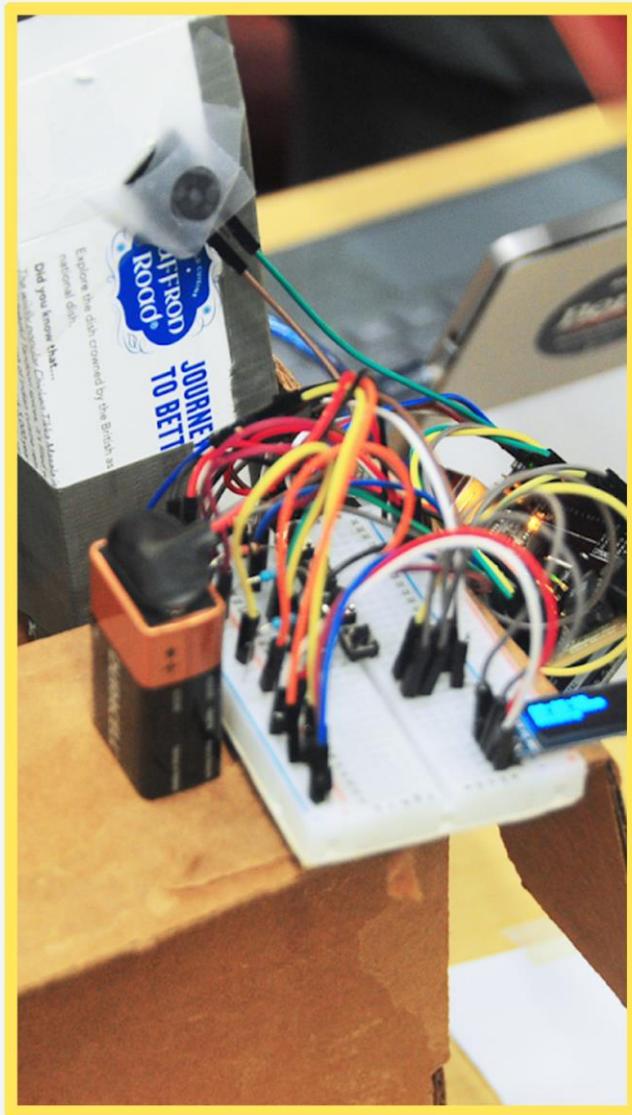


Photo courtesy of: [robocup.org](http://robocup.org)

# QUARTERLY PROJECTS

<http://ieeeucsd.org/pages/projects.html>



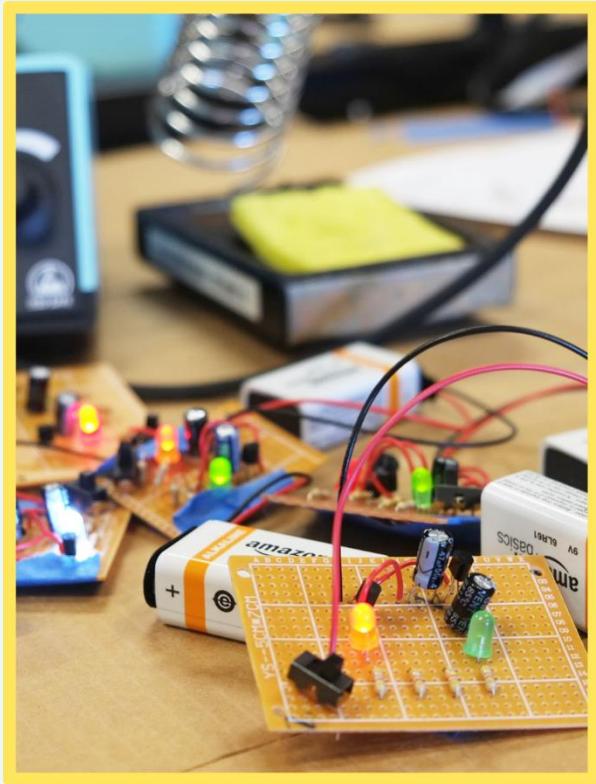
Quarterly Projects (QP) are entry-level projects designed to introduce students to building their own engineering projects. We don't expect experience or expertise – instead, we look for people motivated to create and looking to enter the world of project design. We also introduced a program joint with QP known as Quarterly Projects ++ (QP++), which are more sophisticated robotics projects designed for more experienced students. Each quarter, we develop a challenge that will teach competitors fundamental skills in computer and electrical engineering, leaving participants with the tools and knowledge necessary to design their own projects.

Skills involved: Arduino, Raspberry Pi, web design, prototyping, and app development

## DIY COMPANY PROJECTS

Our members are talented when it comes to interdisciplinary skills, and are always up for a challenge. Whether it be tracking early signs of Parkinson's disease, building energy-efficient wireless robots, or creating the most appealing websites. With your donations, you can propose/fund any project for our members and direct the technical aspects of that project, while our organization will handle the logistics.

# REGULAR EVENTS



## TECHNICAL WORKSHOPS

Our Technical Committee regularly hosts workshops to teach students at UC San Diego practical engineering skills and prepare them for future careers. These workshops cover various topics such as machine learning, circuit designing, PCB design, microcontrollers, and software development. With your help, we can better provide high quality and engaging workshops to a large number of our student members. We also welcome company-hosted workshops, as well as the donation of materials.

## PROFESSIONAL DEVELOPMENT SESSIONS

Our Professional Development Committee is determined to equip our students with the skills and vision essential for their future careers. Our team regularly hosts career development sessions to help students with resume critique, mock interviews, and choosing the right industry for them. We would like to extend an invitation to you and your company to collaborate with us on professional development events such as hosting an info session, tech talk, tour, and/or recruiting event.



# SPECIAL EVENTS

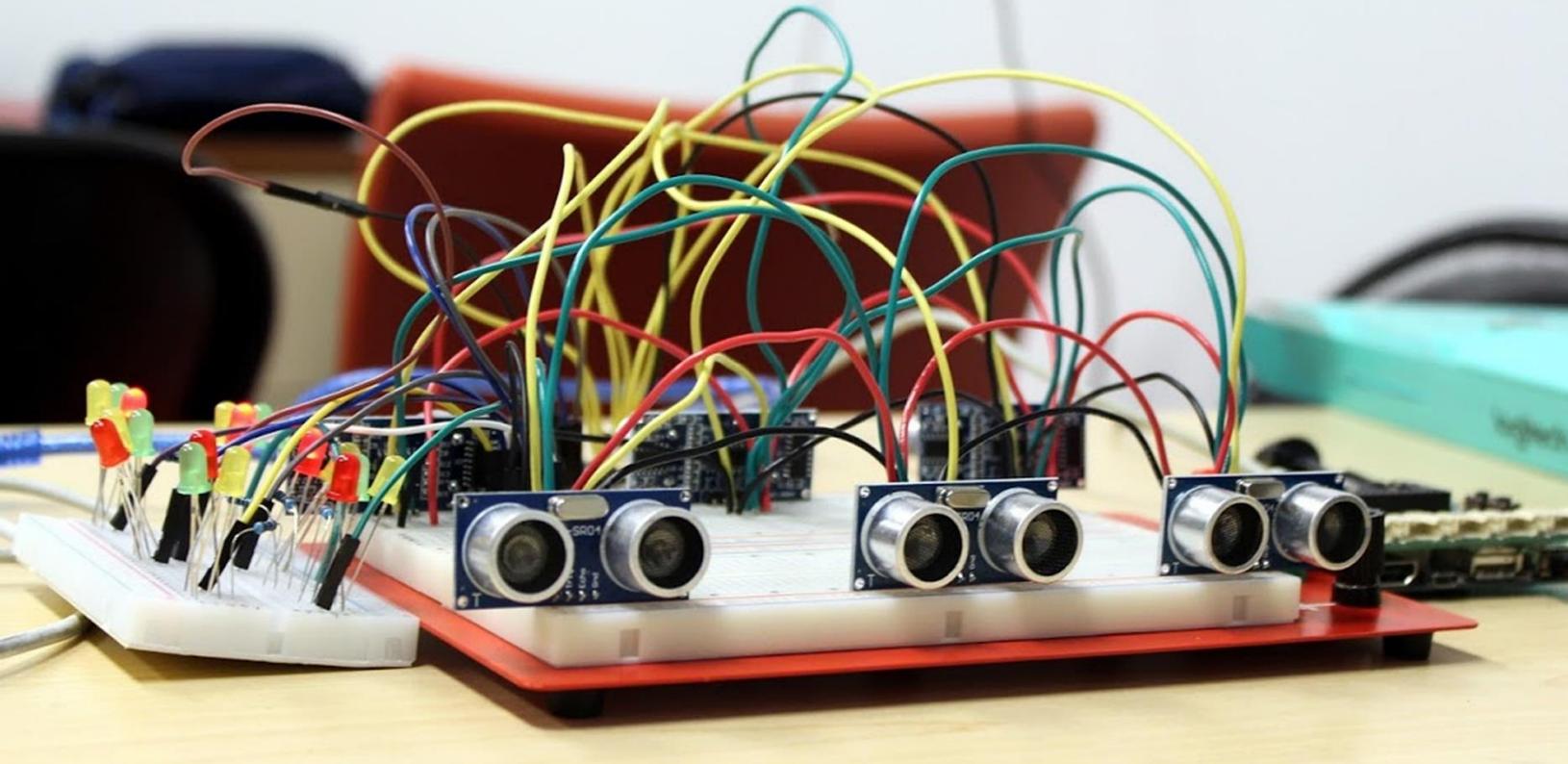


## REVERSE CAREER FAIR

Reverse Career Fair is an annual event co-hosted by IEEE and ECE Undergraduate Student Council to provide engineering students with a platform to showcase their projects to company representatives.

At this event, students are encouraged to network with industry professionals and pitch their projects to event attendants. Please feel free to contact us if you want to be “recruited” at our event by our talented students.

# SPECIAL EVENTS

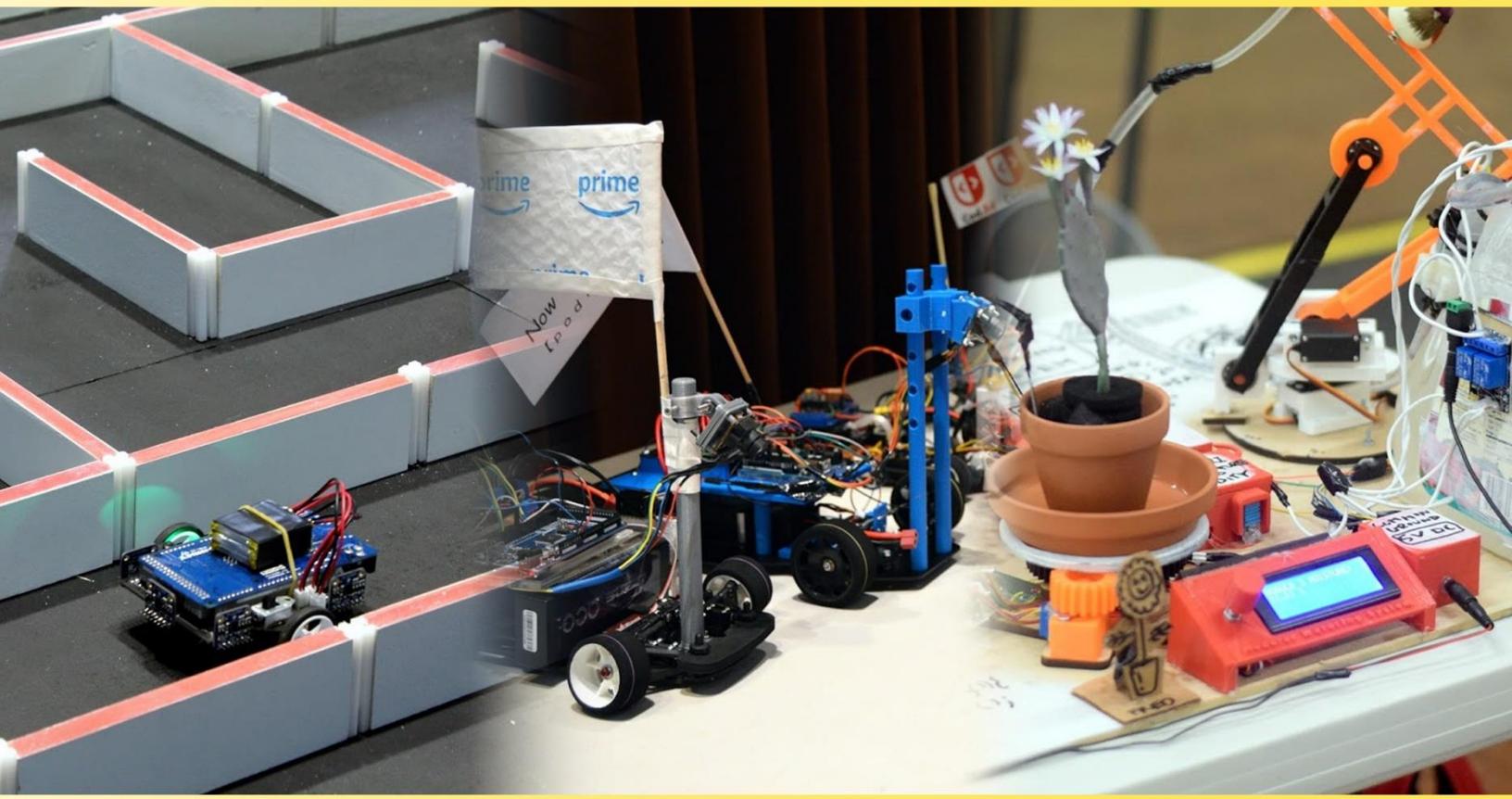


## H.A.R.D. HACK

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H.A.R.D Hack is an annual hardware-focused hackathon co-hosted by IEEE and HKN under the ECE department of UCSD. During 24 hours, students are expected to collaborate in teams to build projects that can tackle real world problems. Integration of hardware and software is emphasized and multidisciplinary skills are highly encouraged. Please contact us if you want to host technical workshops or career sessions at the hackathon.

# SPECIAL EVENTS



## ROBOFEST

(~middle of May)

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Robofest is our annual celebration of robotics filled with events, workshops, and project showcases from students all across California schools. During this fun-filled weekend, Robofest primarily features the annual California Micromouse Competition, Grand PrIEEE Competition, and the Spring Quarterly Projects Showcase. Please feel free to contact us if you are interested in hosting any kind of event, such as a workshop or company tech talk.