



# FOOTHILL

## May Monthly Newsletter

### IEEE Foothill May ExCom/OpCom Monthly Hybrid Meeting

Prepared by: Max Cherubin | Proofread by: Gerald Herder

The IEEE Foothill May ExCom/OpCom Monthly Hybrid Meeting was held at DeVry University in Ontario and via BlueJeans. The meeting started at precisely 7:18 pm with a chairman's remarks. The chair congratulated Ed Perkins for the success of SusTech as the Conference Chair. He also shared that the section received \$151 from Nick Masetti as our e-Lynx revenue share. The chair is happy to share a birthday card with the section where every celebrant receives a \$25 gift card to active volunteers.

### Section and Committee

Membership Development, Kim Mosley reported that we are up 34 members, now 849 members in the section. We had one senior elevation. As of today, with two outreach attempts, Kim will be forwarding two potential referees for Jeff Grayson's senior elevation effort, Chuck Walrad and Michelle Thompson. Scott Wedge volunteered to be the third referral for Jeff Grayson.

For Social Media, Osman Ceylan reported that we last had a few website visitors last month. For LinkedIn, we have 64 members, while on our Facebook page, we have 60 members. We are still encouraging the section to always post chapter events on our social media accounts because, in that way, we can advertise the section.

### Student Chapter

Among the universities under the Foothill Section, only DeVry University was able to report since some universities already had completed their spring break.

Prof. Moe Saouli reported that they would have a virtual event on May 26 regarding Intellectual Property. The chair asked for more details to advertise the event to the section.

**WI**

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## Technical Committees

MTT, Scott Wedge talked about Microwave Week, which will be June 11-16. The big event that week will be the RFIC Symposium, one of Microwave Week's three components. It is from Sunday until Thursday, and Tuesday is purely technical. The big conference is the Design Automation Conference, which is all about electronic design automation. RFIC is sponsored by the Solid-State Circuits as well as Electronic Devices. Nanotechnology, Dr. Jenny Yu and Christopher Lai presented updates about their workshop series. From April 12-May 9, there were twenty-four workshops: a project and a development workshop. There were 12 attendees. Arduino Workshop, 50 attendees. They also had another SETC Meeting. Last month they had a new high school in attendance from Irvine. The SETC poster presentations are due this month. For the whole academic year, there are four workshops. Please take a look at the article on page 5 for more updates about their workshops.

ComSoc, Prof. Tamer Omar talked about WTS 2023 last April 19-21, attended by Christopher Lai and Bethany Chang, who volunteered to work on the event. They were supposed to have a speaker from NI. Chris and Beth contacted Centerpointe for reservations; however, the speaker from NI canceled due to other commitments and a conflict in schedule.

Computer Society acting co-chair Amal Altahi reported about the success of their event last May 5th, which was the ChatGPT in Healthcare: Boon or Threat. She thanked the section for their support and shared that they are planning an event on June 22nd, but they still need to finalize with the speaker since the speaker lives on the east coast. They are going to talk about AI in the Industrial Landscape.

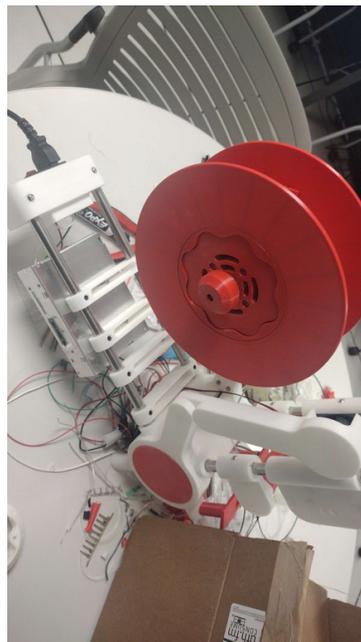
Consultant Network Cash Sutton shared the agenda about their Consulting Workshop with AICNCC and encouraged the section to attend. The workshop will discuss improving your networking skills, setting up your consulting business, what consultants need to know about IP, Copyrights, and Patents, how to find clients and entrepreneurship. There is a \$10 registration fee, and you can have pre-registration or walk-in registration.

Before the meeting adjourned, Scott Wedge suggested making Christopher Lai our student representative, which was then supported by the chair and the section. His task is to give the team an update from all the universities under our section about their events, activities, or if they need sponsorship.

## Students Chapter

*Reported by: Ivan Magana*

*What's  
New*



CSUSB finally finished their polymer and used 3D filament to print a cube and some gears.

# IEEE SusTech2023

SusTech 2023 Report  
10th IEEE Conference on  
Technologies for Sustainability  
Portland, OR — April 19-22, 2023  
<http://iee.org/sustech>

*Sent by: Ed Perkins*



The 10th IEEE Conference on Technologies for Sustainability (SusTech 2023) was held hybrid on April 19-22, 2023, in Portland, Oregon.

The SusTech 2023 Program featured Keynotes, Panels, Papers, Student Posters, and a Sustainability Forum. See <http://iee-sustech.org/archives> for details on the program and events.

The SusTech conference is designed to explore development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It brings together scientists, engineers, technologists, and scholars from multiple disciplines to hold a dialogue on environmental issues and collaborate on ideas to develop and utilize innovative tools and intelligent systems to address the need for Sustainable Infrastructure. Attendees will learn about emerging technologies, the latest tools, and proactive solutions to take their sustainability programs to the next level. Papers are solicited from industry, government, and academia (including collegiate students) covering relevant research, technologies, methodologies, tools, and case studies. Conference content that meets IEEE quality review standards and format will be submitted for inclusion into the IEEE Xplore Digital Library.

For the 10th Anniversary, we looked into policy and economic influences on the diffusion over the past decade of sustainable technologies into general practice (e.g., design and implementation).

Sponsors for SusTech 2023 included the IEEE Oregon, San Fernando Valley, Inland Empire (Foothill), Orange County, and Coastal Los Angeles Sections, IEEE Region 6, IEEE-USA; and co-sponsored by the IEEE Industry Applications Society (IAS), Oceanic Engineering Society, Power and Energy (PES) Society, Society on Social Implications of Technology (SSIT), Standards Association (IEEE-SA) and Technology and Engineering Management Society (TEMS).



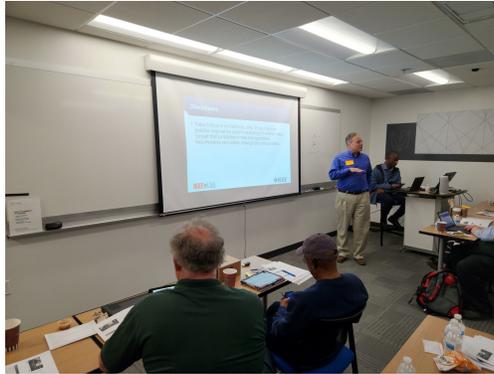
For more photos, [click here](#):



# AICNCC & IEEE-CN: Consulting Workshop

Prepared by: Cash Sutton - FHCN Chair

I am grateful for the presentation and incredible insights provided by the speakers of the Alliance of IEEE Consultants' Network Coordinating Committee (AICNCC) and the support of Dr. Moe Saouli and DeVry University for hosting our event. Our own Bill Grist presented a talk on Networking; Charles J. Ford, P.E, spoke on Where to find Clients or Marketing 101 for Consultants; Michael R. Behnke, P.E, presented, Licensing and the Engineering Consultant, and William R. Kassebaum, P.E., presented, How to Start and Expand a Successful Consulting Place. They were all captivating speakers and brought more than a century of experience to our conference. Also in attendance from AICNCC were Daryll Griffin, the moderator of the session and guest Mohammed Billoo and Larry Nelson. We had 18 registered and 10 walk-ins with two no shows for a total of 26 in attendance. The involvement of AICNCC certainly raised the value of our Foothill Consultant Network (FHNC) and I look forward to an increased involvement by local members.





## STEM Workshop Series a Hit with Student Attendees

*CPP Hyperloop's Season 3/4 Collaboration Workshop Summary*

*Reported by: Christopher Lai*

### **Introduction**

Over the course of the 2022-2023 school year, members of the Cal Poly Pomona Hyperloop club collaborated with IEEE Foothill and IEEE NTC to bring 24 unique workshops to life. These workshops cover introductory engineering and project design principles, meant to encourage students to start developing projects of their own. The final challenge placed before the students attending these workshops is the IEEE SETC (Student Engineering Team Challenge) event. In this competition, students utilize what they learn from the workshop series to develop solutions to advanced engineering problems identified around the world today.

The workshop series was a tremendous success, bringing together 904 total students for a one-of-a-kind learning experience. Each workshop is recorded and uploaded to YouTube for future reference. The online program showed an even greater boom, with a total of 67 subscribers and 1,388 views collected over the course of 10 months.

Of the 24 workshops, some of the most popular and notable workshops included the circuit construction workshop, 3D printing workshop, soldering workshop, flight control workshop, and Arduino workshop. These workshops, noted as “lab-type” workshops by the leads, allow students to perform hands-on learning with tools provided by generous sponsors. CPP Hyperloop leads experienced with the workshop topics guide students to success, following Cal Poly Pomona’s “Learn by Doing” motto.

Less popular, although just as important, workshops include the “lecture-type” workshops, which are led by students teaching a niche topic that they are very interested in. These workshops, such as the Sustainable Engineering workshop taught by Addie Hasson, the Artificial Intelligence workshop taught by Spencer Hubert, and Project Development Workshop taught by Zachary Johnson, consistently bring in interested students from all fields to hear why the topic is important in our daily lives.

The workshop series concluded on April 21st, 2023. This is the second year in a row that the workshop series has been run, and it has seen an over 1000% increase in growth when compared to the previous year. The eventful year has been made possible with sponsors, assistance from various IEEE branches, and high school faculty that have actively provided students with learning opportunities as they progress through their academic careers.

The below sections showcase highlights from our most popular workshops:

### **Soldering Workshop (Blinky Learner 2)**



*Blinky Learner 2 Soldering Kit Completion*



*Students soldering project kit (Blinky Learner 2) together*



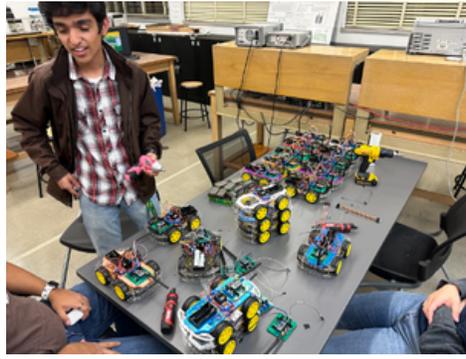
*CPP Robotics members supporting workshop series and soldering kits*

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## Arduino Workshop (RC Driver Manual Driving)



Group picture at the Grand Prix Race ramp

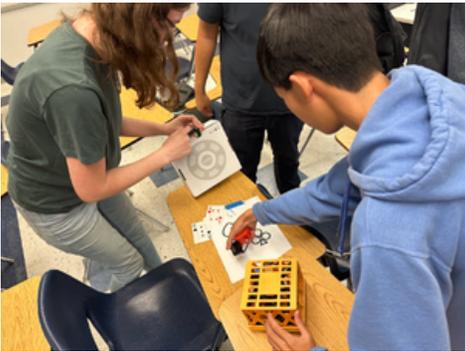


CPP Hyperloop logistics team assembling 20 RC Cars and controllers



RC Car race at the CPP Bronco Student Center

## 3D Printing Workshop (The Great 3D Printing Escape Room)



Escape room team solving card and box puzzle

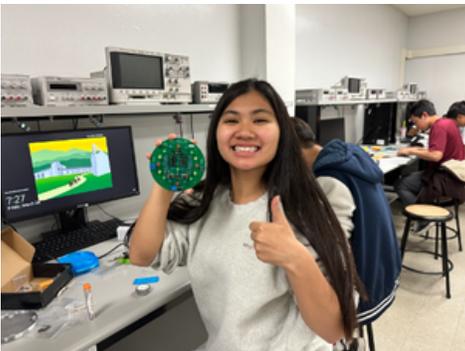


Escape room team box puzzle with 3D printer



Masterlock of the escape room, signifying the last stage of escape

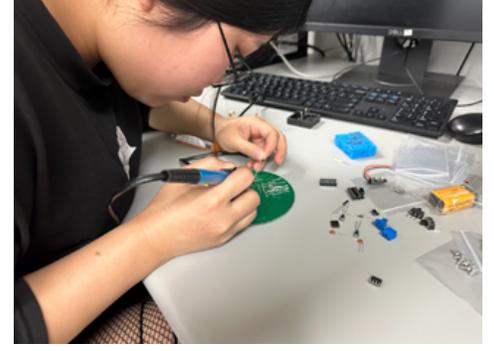
## Soldering Workshop (Blinky Learner 3)



Maggie Hoang, student, completing Blinky Learner 3 soldering kit at workshop



Closeup image of Blinky Learner 3 soldering kit with case



CPP Alumni soldering project kit together

## Flight Control Workshop (DJI Tello Obstacle Course)



Workshop attendees assisting with the setup of obstacle rings on tripods



Group picture of Team B with their drone



Group picture of Team C with their drone

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# Arduino Workshop (Autonomous Car Edition)



Modified self-driving RC Cars with line follower track



Students completing skeleton code for self-driving car on track

For more updates and photos you can [view here](#)....

## Acknowledgments

On behalf of CPP Hyperloop, we would like to thank all the members of IEEE Foothill for assisting us with the preparation and execution of the Fall 2022 and Spring 2023 workshop series. Thank you to Dr. Jenny Yu, our primary advisor and logistics manager. Thank you to Professor Gerald Herder for assisting with location logistics for the Circuit Construction Workshop. In addition, we would also like to thank our partner clubs, CPP Robotics, for assisting with student outreach efforts, providing the lab workshops with equipment, and volunteering to assist students in the workshops. We would also like to thank our sponsors for making the workshop series possible. Thank you to IEEE Foothill, IEEE Orange County Section, IEEE Nanotechnology Council (NTC), IEEE Orange County Joint Sections Chapter, and Maury Microwave Co. for your generous financial support. Finally, we would like to thank all the students for coming to the workshops, learning with us, and having fun! Thank you for all your support!

## Upcoming Events

UE

IEEE Foothill June ExCom/UpCom Monthly Meeting (June 13, 2023)

IEEE Foothill Consultants Network Meeting (June 07, 2023)

IMS 2023 (International Microwave Symposium) (June 11-26, 2023)

## SOCIAL MEDIA

SM



[www.facebook.com/ieeefoothill](http://www.facebook.com/ieeefoothill)



<https://linkedin.com/groups/13516173/>



IEEE Birthday Card will be given to all active members of the section.



We always welcome volunteers, and if you want to become one you can email us at [sec.foothill@ieee.org](mailto:sec.foothill@ieee.org).

