

UNH IEEE Student Organization Report 2022-2023

Introduction:

The University of New Hampshire IEEE Student Organization is a club in which we aim to educate, connect and collaborate with other students, both undergraduate and graduate, as well as faculty and external IEEE members. To accomplish this, our student branch holds many meetings every semester, including hands-on learning events, presentations displaying current field technologies and research opportunities, as well as helping with social events to connect our members and community.

In the past few years, our IEEE student branch was unable to hold hands on learning events due to Covid-19, so our goal this year was to hold several events in which we could connect students with activities to help aid them in their academics and personal interests. This report contains the list of events we were able to hold, and the results that were obtained.



Events:

- **Arduino Events**

This year, we obtained 15 beginner arduino kits. With these, we held two arduino events where students explored breadboard circuit design, as well as coding to make their circuit perform to their expectations. These events were highly liked by students, and we will be sure to bring them back for next year.

Participation: 8 and 7 people

Photos:

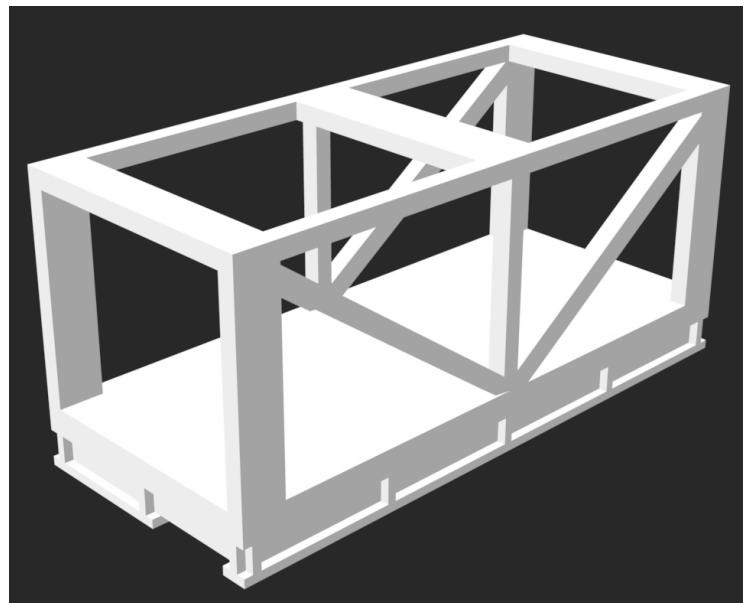


- **3D Printing Competition**

For our 3D printing competition, we challenged our members from all engineering disciplines to design a small bridge and a creative design using Autodesk CAD and Fusion360. The main point of this competition was to explore these softwares, as they are extremely relevant across all engineering fields. The bridges were then tested as a point to see how much weight it could hold, and the creative designs were voted on by participants. A point system was used to see who had the best two designs, and the winner won a 3D printer.

Participation: 5 people

Photos:



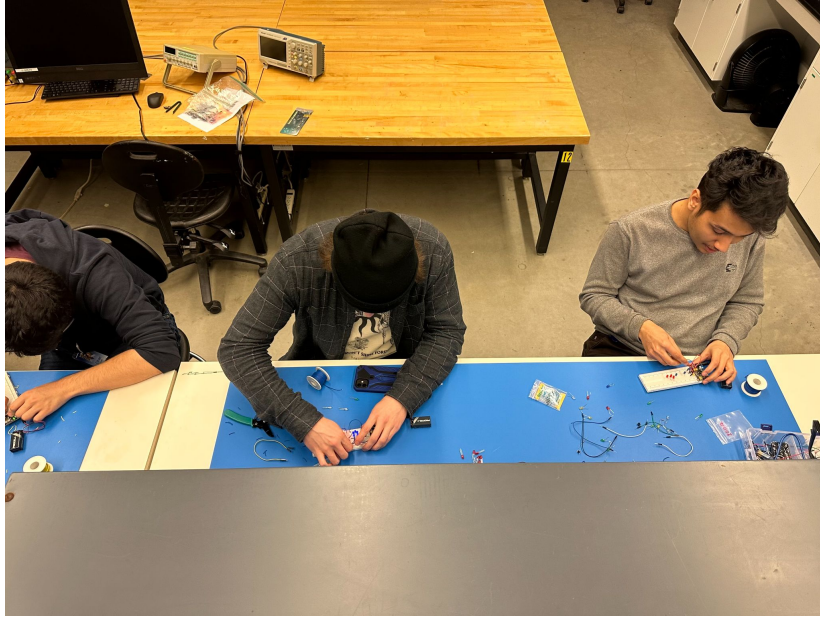
- **Breadboard Competition**

With input from members, we aimed to put on a simple breadboard circuit event. We decided to have participants try to make the word “UNH” using LED lights. The person who completed this the fastest, with all lights turned on won IEEE prizes! This event helped to teach students about series and parallel connections, as well as shorting.

Participation: 8 people

Photos:





- **Cybersecurity Presentations**

Our Chief Technology Officer, Joshua Calzadillas, gave two presentations on Cybersecurity to our members. During these presentations, Joshua went into depth on the IoT (internet-of-things) & wireless security in order to get a learning experience of embedded system security.

Participation: 14 People

Photos:



- **Robotics Event**

Using robotics kits, members worked on assembling the robots following instructions, and had the freedom of programming their builds to perform any way that they would like. This event had a low attendance due to being held late in the semester, so it will definitely be brought back next year.

Participation: 3 People

- **Professor Research Presentations**

Two professors, Dr. Dialang Chen and Dr. Dean Sullivan, gave presentations to our members on the research they do here at UNH. From these presentations, our members were informed about what research is done within the UNH Electrical Computer Engineering department, and how they can get involved as an underclassman.

Participation: 20 People

- **Volunteering**

Throughout this year, many of our members volunteered their time for several different events. Our IEEE Student Organization advisor, Dr. Qaiyon Yu, held two events, a WISE (Women in Stem) and a Cybersecurity Day event. For these two events, our members helped with room preparation, set up, clean up, and with food. Our members were also willing to volunteer their time for Admitted Student tours. These tours were for High School students who had been accepted into the Electrical Computer Engineering Department, and were walked around the engineering building by our members. They also talked with these students about their experiences.

Photos:



- **Social Events**

Taking a break from academic exploration, we also aim to connect our members socially. Throughout the year, we held two movie nights and two gaming nights, where students collaborated socially, and could take a break from their studies! We also hosted a joint social event with the ECE Department at a local burger place called Hop and Grind.

Participation: 49 People (Hop and Grind), 8 People (Movie Nights), 10 People (Games)

Photos:

