

My name is Bradley Schulz and I am extremely excited to be studying electrical engineering at UCLA! I was born and raised in the Bay Area (specifically San Carlos / Redwood City), so I have always been immersed in an area rich with technology and innovation. Moreover, I come from a family of engineers, so engineering has always felt like a path I was meant to pursue.

I began experimenting with circuits at the end of 8th grade, and since then I have been fascinated by the seemingly magical possibilities made possible through electrical engineering. Through exploring online tutorials and playing around with designing circuits on my own, I was able to learn the fundamentals of circuit design and build several custom projects. I started off with simple lighting projects of just LEDs and resistors, and then I moved on to LED cubes, laser tripwires, and many color organs (or graphic equalizers). My biggest project so far is an 11x11 RGB LED matrix with infrared sensors integrated into each pixel that allows the matrix to sense any nearby objects and illuminate in the shape of the object it detects. I also built a custom Internet of Things system in my room that allows me to turn on and off the lights and open and close the door to my room. All throughout high school, I could not wait to get to college in order to both receive a formal education in circuit design and have a multitude of opportunities to collaborate with other like-minded people on new and innovative projects.

Now that I am at UCLA, I am involved in both IEEE and Bruin Hyperloop. With IEEE, I am doing the micromouse project where the goal is to create a maze-solving robot. So far, that has been very enjoyable and educational. With Bruin Hyperloop, I am a co-lead for the electronics sub-team which is responsible for the circuitry behind our pod's sensing and communication capabilities. (If you don't know what hyperloop is, it's worth a google search because the premise behind it is extremely cool.) Outside of engineering, I love running (I did track and cross country all through high school) and exploring all the food options available at UCLA's #1 dining program.

In the future, I hope to get involved with the Internet of Things because I believe that field contains incredible potential for growth. I would love to work with embedded systems and find ways to use technology to encourage sustainable practices. For example, working on a network of sensors that monitor agriculture in order to maximize the efficiency of crop yields while simultaneously minimizing pollution would be a very interesting job. But overall, I am extremely excited to see where my education and career will take me!