Achinthya Poduval

May 2020 - UCLA Fast Track Student of the Month

When did you know that you wanted to become an EE?

I'm not really sure. I feel like I've always liked math and science, both of which are prevalent in electrical engineering. I knew that I wanted to go into a field like electrical engineering because I grew up in the Silicon Valley, which has a rich history of engineering and innovation. I also enjoyed interacting with tech such as computers, which I used for homework and videogames, and while I understood how to use them, I also wanted to learn how they worked, so I felt motivated to pursue electrical engineering.

And why did you decide to come to UCLA?

Out of all the schools that I got into, UCLA gave the best financial scholarship as I got the Regents Scholarship, and I was also accepted into Fast Track. Then I read that UCLA had the best food and best residential life so I was sold. The weather is also really nice in Los Angeles.

How do you like UCLA so far?

It is amazing, even though I only got 1.5 quarters there before we transitioned to remote learning due to Covid-19. It's just epic in general. I like walking around and seeing the positivity on campus. I think Gene Block talks about Bruin Optimism, and I can feel it on campus. Being near Janss steps where all the people are vibing on the lawn is where the positivity is the strongest, but it is also pretty

Birthplace:
Brockton, Massachusetts

High School:
Redwood High School in Larkspur, CA

Hobbies:
Ultimate Frisbee, video games (Valorant, Destiny, and Destiny 2), reading fantasy novels, and playing the drums

Favorite Dining Hall:
Rende West

strong on the IM fields where I play ultimate frisbee with my friends.

What have you done to make your experience here worthwhile?

I joined IEEE, and I am the secretary for the 2020-2021 school year. I was also a part of the Design Create Solar club, which is focused on sustainability and solar energy. The club's main focus is to build a solar panel that will be shipped to Jordan. We were also working on a smart solar panel that would tilt based on the angle of the sun to always receive the maximum amount of sunlight, and these panels were supposed to be placed around UCLA to provide portable charging stations for phones and laptops. I am now in the process of joining SMERC, the Smart Grid Energy Research Center for more research opportunities in the area of sustainability. SMERC is composed of a variety of projects, which involve electric vehicles, batteries, a smart grid, as well as others. I want to work on the smart grid, but I need to learn more about what my research involves before I can say which part I'll be working on.

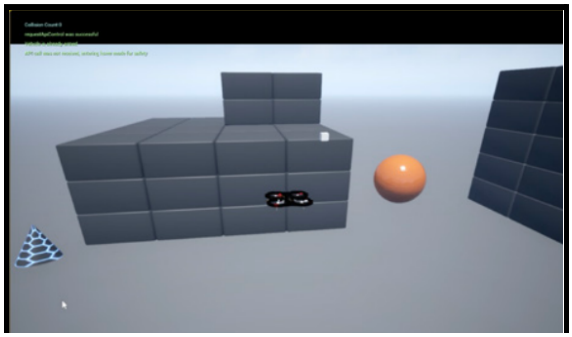
What are you interested in as a career?

I mean the main thing I'm trying to go for is sustainability because I am worried about climate change, so I am looking into companies and startups that work at the intersection of sustainability and electrical engineering. I'm not quite sure how to describe what I'm looking for quite yet, but I am pretty invested in solar energy and I would be most interested in solving the problem of efficient distribution instead of just production.

How do you like the Fast Track program so far?

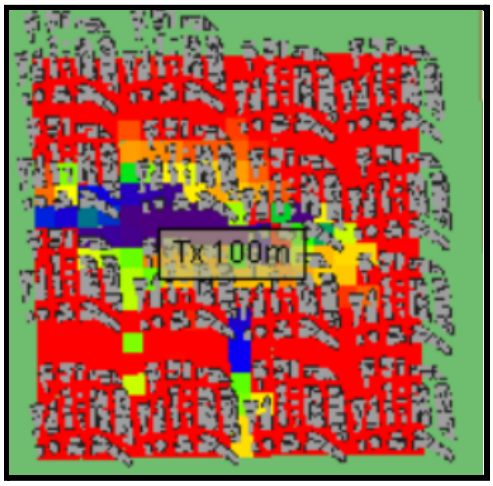
I think its pretty solid. I met most of my friends through Fast Track, and the program itself is nice because it gives a pretty good outline of which classes we should take. Having the research opportunities is also great because it is generally pretty hard to get as a freshman. The pizza at the meetings is also very good, although for some reason it is cut into squares.

And what did you think of your research?



Unfortunately, it was remote this summer, but there is nothing we could do about that. The lab that I was a part of was the Cognitive Reconfigurable Embedded Systems Lab, where I worked on a simulator for UAV communications.

I hadn't learned about communications before this, which meant that I had to read a bunch of other people's research to become familiar with the subject, which was really cool. Modeling signal loss for UAVs is not something you would hear about in the general public, which made it cool because I got to see how new ideas are developed. The visual portion of the simulator was created using the Unreal Game Engine, which is also used for popular games such as Fortnite. The simulator would allow you to fly a UAV around a city which had antennas placed in various locations. A second program, Wireless Insite, was used to calculate and measure the signal strength and loss for various antenna configurations, and it was the output of this program that was used to visualize the signal strength in the UAV simulator. Overall, I had a positive experience because I learned about emerging technology that I had known nothing about.



What are your plans after graduation?

My plans aren't set in concrete because I am planning on minoring in Environmental Systems and Society, which explores how environmental science relates to politics and society. However, I am hoping to get into UCLA's Exceptional Student Admissions Program, which would allow me to graduate with a Bachelors and Masters degree in just five years.