Sahil Dani

UCLA Fast Track – Student of the Month – January 2021

My Life Story

I was born in Irvine, CA and lived there for the first 6 years. Then, I moved to a Chicago suburb for the next couple years and studied in a Montessori school. I then relocated to India for 5 years during my middle school till 8th grade and again moved back to California for my high school. It has been quite an exciting journey full of experiences with vibrant cultures from different places.

High School

Aliso Niguel High School

When did you know you wanted to be an Electrical Engineer?

I was actively involved in the Science Olympiad club at my high school since my freshman year where I helped in building many hands-on projects ranging from hovercrafts to a Rube-Goldberg machine. I have always loved solving math puzzles from a very young age. I enjoyed learning about circuits, magnetism, and induction in my AP Physics C class. I also took a class on Optics and Waves through Stanford University's ULO program during my senior year of high school to continue learning advanced physics. After taking these Physics and Calculus classes and working on an interesting summer programming project at my parents' software consulting company, I realized that I wanted to pursue a career that involves both hardware and software. So, I chose EE as my major with a technical breadth elective in CS.

Who has influenced you most in your choice of academic field?

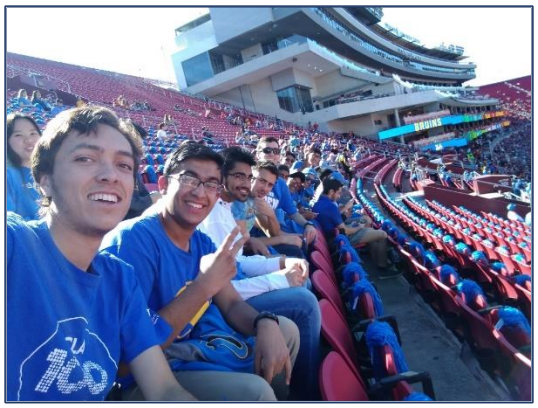
My parents, who are ERP and Database Software Consultants, have influenced me the most in choosing EE. I've grown up watching them apply their logical, analytical, and problem-solving skills in their field. Over these years, they have passed down their passion for the field to me.

Why did you choose UCLA EE?

The Fast Track Program was one of the main reasons I chose UCLA EE. I believe that working and collaborating with my new intelligent and like-minded colleagues in Fast Track, the guidance from highly qualified professors at UCLA, and the summer research and internship opportunities will better prepare me for my future career endeavors. In addition to the excellent learning experience, there are multiple opportunities for hands-on and practical learning outside of class through clubs such as IEEE and Bruin Racing. Apart from the academic experience, I chose UCLA because of the beautiful campus, bright and sunny SoCal weather, and proximity to home.

What are you interested in as a career?

As an EE undergraduate, I am currently interested in topics such as circuits and embedded systems, machine learning, and signal processing. I am sure that I will be able to narrow it down to a specific area once I take more upper div EE classes. Based on my current preferences and my technical and analytical skillset, I feel that I would be a good fit to work/research in the areas of Integrated circuits, Wireless Communication Systems, AI, and business applications design and development.



How has it been on campus so far?

I was fortunate enough to be able to spend my first 2 quarters on campus. Everyone was really welcoming during those first few months. I met a lot of new friends, many of them through Fast Track. Apart from that, the sporting facilities, weather, and food on campus is absolutely AMAZING. The atmosphere around campus for home games at Pauley Pavilion is electrifying. All my memories from the first 2 quarters on campus, and my group of friends from Fast Track have helped me get through quarantine and the online learning due to the pandemic. I can't wait to get back to the normal hustle-bustle on campus and meet my friends again as soon as it is safe to do so!!

How has your academic year REU experience been?

I am working as an undergraduate researcher in Professor Dejan Marković's Lab for the 2020-21 academic year. This past fall quarter I had been learning more about the Cadence Stratus HLS tool, and how it can replace the traditional MATLAB and Simulink software for hardware verification and optimization purposes. Currently, I am working on the documentation of how the Stratus HLS tool can be used to generate data flow graphs, verify hardware through logic simulation, optimize hardware design and perform hardware cost analysis. Once I am done with this documentation, I will be applying the knowledge I gained from the Stratus HLS training to work on a radar systems research project for the rest of the academic year.

Outside Interests: Playing and watching a variety of sports including tennis, basketball, football, cricket, and baseball, travelling and exploring new places, trying new cuisines, cooking (have learnt a few things during quarantine), watching movies, playing guitar