

## **Rohan Soni - Fast Track - Computer Engineering - Class of 2028**

Hello! I am Rohan Soni, a student at UCLA from San Diego, California, majoring in Computer Engineering in the ECE Fast Track program. My interest in engineering began in elementary school, and I chose to focus on Computer Engineering because I enjoy both hardware and software.



### **Research & Experience**

This past summer, I completed the Summer Undergraduate Research Program with the NanoCAD Laboratory, where I am now continuing my research during the academic year.

In previous internships in both industry and academia, I've explored various topics, including web development, embedded chip design, and information theory. At Shire Silicon, I used Python to develop binary-to-assembly language converters and an automated test environment. During an internship at MIT, I applied mutual information estimation methods to simulate the effects of image processing on a database of faces, and then verified the results using Deep Neural Networks.

My passion for engineering extends to hands-on projects. In activities like FIRST Robotics, Project Lead the Way (PLTW), and Science Olympiad, I completed many projects, from mechanical to wireless. As the Hardware Lead for my robotics team, I built thirty-pound robots. Other projects include an automatic mechanical parts sorter, a self-stopping gravity-powered vehicle, and even a custom 3D-printed 2.4 GHz Yagi-Uda antenna.

I believe studying Computer Engineering at UCLA will allow me to build on my experiences and make a world-changing impact through technology spanning hardware, software, and their intersection.

### **UCLA & Interests**

At UCLA, I am involved with IEEE's Micromouse Project, where we develop a miniature maze-solving robot from scratch. I also volunteer with Science Olympiad at state and regional tournaments writing and proctoring exams. I love the ECE Fast Track cohort and the activities we do together. In my free time, I enjoy playing the piano and flute, arranging Bollywood music, solving Rubik's Cubes blindfolded, and playing tennis and pickleball recreationally.

I love UCLA because the people I meet are incredibly bright and help me constantly develop new ways of thinking and questioning the world. The collaborative environment and easy access to new perspectives allow me to connect dots across different disciplines and ultimately innovate.

Looking ahead, I am considering a PhD to gain the experience needed to solve complex problems and advance knowledge beyond its current state. I am excited to continue doing research on applied problems, as I see myself building a future in this field.