

STUDENT SPOTLIGHT



6 Questions with *Derek J. Russell*

Hayward, California

Computer Engineering

What made you choose engineering?

My fascination with computer troubleshooting and maintenance sparked my decision to pursue engineering. When our family computers experienced issues, such as malware or viruses, my father would call Geek Squad to resolve the problems. Over time, I became curious about how the technicians could fix these issues and restore the computers to their original, efficient state. As a result, I developed a strong interest in understanding the intricacies of computer systems. Whenever I encountered problems with my computer, I took the initiative to troubleshoot and resolve them, whether due to slow performance or other complications. While there were instances where I initially struggled to find solutions, I gradually became adept at eliminating viruses and optimizing my computer's performance, making it run as if it were brand-new.

What was your earliest engineering project?

During my time at Cal Poly, one of my earliest and proudest engineering projects was when I collaborated with my classmate and best friend, Brenden Sprague, on a website called FadeFinder. The idea was inspired by our mutual friend, Essa Ababseh, an electrical engineering student at Cal Poly who cut hair on the side. Ababseh expressed a desire for an efficient way to schedule appointments for his clients. FadeFinder is an innovative web application designed to provide customers with an accessible and user-friendly solution for scheduling appointments in a well-organized manner. What distinguishes FadeFinder from other barbershop booking apps is its seamless integration into existing barber websites or its function as an independent web application. This groundbreaking platform's primary and essential feature is its ability to manage client schedules for barbershops effortlessly.

Where do you like to hang out on campus?

Personally, I enjoy spending time in the weight room, whether it's at the recreation center or my apartment complex. I find it to be an ideal sanctuary for improving my physical physique, overall strength and health. The weight room allows me to get in the zone while playing my favorite music, motivating me to push myself during workout sets. My all-time favorite exercise is back squats, as they hold deep metaphorical significance for me and

help build a solid foundation for overall strength. Most importantly, back squats symbolize my ability to overcome challenges, endure burdens I didn't deserve, and triumph over adversities and doubters who questioned my ability to achieve my dreams. As a Black man, I have also had to overcome both subtle and un-subtle racism at Cal Poly. The weights on each side of the Olympic bar represent the challenges I faced in my life, reminding me that no matter how difficult things got, I had to push through and overcome these obstacles to reach my ultimate goal of becoming an engineer.

What has been your favorite class and why?

My favorite class during winter 2023 was CPE 450 Capstone II with Dr. William Murray. I had the opportunity to work on an exciting project called "Solar Tracking on Autonomous Mobile Platform," which built upon the work of Cal Poly's engineering students who have developed multiple mini-Mars Rovers over the past four years.

What's your dream job after graduation?

To design, build and test immersive simulation training systems that could be used for flying airplanes, docking spacecraft and anything else you can imagine.

What do you think engineering's biggest impact on the world will be in the future?

Engineering's most significant impact on the world is in artificial intelligence (AI) and machine learning, as these technologies have the potential to advance humanity in unprecedented ways. Harnessing AI and machine learning to combine all knowledge into a singular, autonomous and rapidly learning force on the planet could dramatically change how humans live. This shift will require fostering acceptance of brilliant robots while addressing cognitive biases and concerns about super AI within the field.



CAL POLY
College of Engineering