

## Personal Statement

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I entered the University of California Santa Cruz (UCSC) with a desire to develop and extend myself in and out of the classroom. My four years as an undergraduate student was a period of self-actualization and growth. I strengthened my academic skills, acquired new information, and gained novel experiences. Like many first years, I did not have a definite idea of what I wanted to study. However, I instantly gravitated towards Computer Engineering (CE) because it proved both interesting and challenging. Most importantly, CE is a field that develops products that help improve lives. By my sophomore year, I had already pinpointed the subspecialty of CE I wanted to pursue medical robotics and assistive technology. The summer following my sophomore year, I participated in an undergraduate research fellowship at UCSC. I chose to work at the Bionic Lab because its mission statement, to develop science, technology, and human resources at the interface between robotics, biological systems, and medicine aligned with my research interests.

During college, I also realized my passion for educating others. I started as a co-leader for math sections during my first year of college. For the following three years, I worked as a learning/teaching assistant for College Algebra and Pre-Calculus. In teaching, I derived pleasure from seeing my students happiness as math went from impossible to conquerable. It had the secondary benefit of helping me get a better understanding of the basics of mathematics. I made the conscience decision to continue teaching rudimentary math as opposed to higher-level math or engineering sections because I want to increase the diversity in Science, Technology, Engineering, and Mathematics (STEM).

The two lowest math courses have a disproportionate amount of students who come from

a very low socioeconomic background. Unfortunately, life circumstances have placed these students at a distinct disadvantage to succeed in college. My students were capable and had the aptitude to succeed, and I placed realistic, yet, high learning standards upon them reflecting my belief in them. Through patient prodding and guidance, my students succeeded in math. I see myself as more than just a section leader; as an African American, I am a role model. I viewed my position in the highest esteem because I played an active role in improving the retention of underrepresented students in STEM.

My initiation to programs for improving the diversity in STEM began two weeks before my start of undergraduate work as a member of a summer bridge program for engineering students. This experience jumpstarted my education and implanted thoughts about creating my identity as an underrepresented engineering student. I joined the National Society of Black Engineers (NSBE) and Society of Women Engineers (SWE). These organizations really resonated with me NSBEs mission statement to increase the STEM pipeline is crucial in my identity as an engineer. To improve retention and recruitment for diverse students in STEM, NSBE has students reach out to other students. As a graduate student, I am excited to improve the pipeline by reaching out to undergraduate engineers.

As I embark on my first year of graduate studies, I know exactly where I want to focus my studies. My research interests lie in robotics creating innovative technology to improve peoples quality of life. I also have a clear interest in outreach programs to inspire youth and found that volunteering in these programs have led to a fruitful balance in my life. Presently, I would like to teach higher education so I can continue reaching out to underrepresented minorities in the STEM pipeline.