

Broadcom Scholarship Essay

My journey into the world of Computer Science began when I was a freshman at an all-girls high school. While I have always had an interest in learning about technology, my interest in the subject increased with my participation in the Technovation program. Technovation is a non-profit organization that specializes in aiding young women in entering the Computer Science field by having them work in teams to develop applications for their local communities which they later pitch to investors. Working on developing an application from scratch with my friends at the time opened my eyes to the world of computer science and software development. At this point, by the age of 14, I had decided what my life's passion would be.

Having grown up in a Middle Eastern family, I am used to having so many relatives around whom I could relate to on multiple levels. I have roughly 70-90 cousins combining both my parents' sides of the family. The warmth of having so many loving relatives around and camaraderie in the larger Arab community has been a source of comfort for my entire life. Having grown up in this mutually supportive environment, it was a major shock to initially enter college as a Computer Science major and suddenly feel so out of place. In most of my programming classes I was often the only Middle Eastern student and one of very few women. Suddenly, the social rules seemed so different and one of my greatest struggles was trying to find ways to connect with my classmates. Since I was still new to coding at the time, there were many times when I struggled during assignments and projects. When I first entered a class, I was hoping to make some acquaintances so I could work on my assignments with others in groups as a means of experiencing teamwork in the Computer Science major. Because there were not many students in the class my age, let alone female students, I felt greatly discouraged and wound up isolating myself for quite a while. Having always been a strong student, I was uncomfortable to find that my confidence wavered as my insecurities increased.

Being in an environment where I felt excluded from the majority made me worry that all of the joy in the experiences I was hoping for as a Computer Science major-- learning not only how to code and create programs, but to also experience working alongside others in the same major on projects as teammates-- was an unattainable fantasy. I was passionate about the subject and eager to learn, but found many of my classmates to be dispassionate, taking the opportunity for granted. I eventually realized that the intimidation I felt was the very reason why there were so few women in the Computer Science field in the first place. Letting myself be filled with such feelings of insecurity is precisely what women are expected to feel in a male dominated major. After I realized this, I decided it was about time I set my insecurities aside and show everyone that anybody can persevere in any subject regardless of gender, race, or background. So, I got to work. Because both women and Middle Eastern people are such small minorities in the Computer Science world, I felt that my presence alone could act as a stepping stone for others to encourage more young women like myself to embrace their passion.

Broadcom Scholarship Essay

My desire to pursue a career in the Computer Science industry is informed not just by my desire to lead the way for other Middle Eastern women, but also my ambition to make technology that improves the lives of others; specifically autistic children. My younger brother, Naseef Musleh, whom my family and I refer to as Nicky, is a 23 year old man diagnosed with severe autism. As he is incapable of performing certain tasks independently, such as preparing food for himself, bathing himself, or changing his clothes, he requires constant care and supervision. Despite his lack of communication skills, Nicky has always managed to convey his love for me and our entire family through his constantly smiling face. Seeing him smile warms my heart every time. Having him as a brother has greatly expanded my horizons in terms of how beautiful autistic children are and how much they contribute to the world around us. Because I knew my brother had so much potential, I decided to introduce him into the realm of technology. Since Nicky tends to have trouble remaining still and must constantly be active, I decided to provide a solution that would not only keep him busy and happy, but would also help further develop both his coordination skills and understanding of how to operate modern devices. I gave Nicky an iPad and taught him how to navigate it, hoping he would become interested in learning how to use technology. As Nicky has a nearly photographic memory, he was able to instantly understand how to use the iPad after I taught him only one time. Not only did he manage to quickly adapt to the process of operating any device that has a screen, he immediately began showing constructive results after he started using his iPad more. For instance, he began drawing pictures of what he saw on the iPad screens as a means of communicating how he perceives what he is seeing when using the iPad. Watching Nicky develop such a method of expressing himself had truly opened my eyes as to how much technology can provide to autistic children in terms of both mental and social development. Because of this, I decided that the end goal of my career would be to create a means of education and entertainment for autistic children that will allow them to not only learn daily necessities, but also express their thoughts and feelings directly whenever the level of their communication skills becomes an obstacle for them.

With the \$5,000 award provided by the Broadcom Scholarship, I would finally have the opportunity to not only advance in my graduate studies, but also become able to properly perform my research in Virtual Reality development. Since the goal of my research in graduate school is to develop VR games that will aid in educating autistic children, I would use the \$5,000 to purchase the proper VR equipment I would need to perform tests and research as well as the technology necessary to create such software. On top of using it for the technology I need to perform my planned research, the money provided by the award would also help me in relieving my tuition so that I may continue my education here at San Jose State University for the amount of time required to do my research. As an advocate for children with autism, my goal in pursuing a Masters degree in Computer Science is to develop technology that will help autistic people like my brother overcome obstacles in order to more fully access and understand themselves and the world around them. With this award money, I believe I will be able to take a step further toward achieving my goal.