

Briefly describe your early experiences with science and/or technology.

I was always very good in math and science. I was an excellent student and enjoyed all of my classes, but some of my favorites included chemistry, calculus, biology, and Spanish. I really enjoyed participating in science fairs as a pre-teen. As I matured and lab work became more advanced, I really enjoyed labs that focused on human genes. We did not have many computer labs or electrical projects, except for a brief period in physics class during my senior year of high school.

When did you know you wanted to be an engineer/scientist? How old were you?

For a very long time, I had aspirations of becoming a teacher. My parents bought me my first computer when I was in sixth grade. I was always fascinated by it and wondered how it worked. I didn't even know what an engineer was until I was in eighth grade. Up until that point, I thought engineers were in charge of operating trains! I belonged to a mentoring organization for young teenagers, in which I met a few professional engineers. One of the women I met during that time was a chemical engineer, and she encouraged me to apply for an apprenticeship program sponsored by the George Washington University and the United States Department of Defense. I was selected to participate in this program, and ironically enough, the woman who encouraged me to apply became my mentor in the program. I completed two apprenticeships during my freshman and sophomore years of high school. My mentor focused on environmental projects, but she also began to educate me about the different engineering disciplines. It was through these discussions that I began to seriously consider a career in engineering.

When I began college, I had my first course in C programming during freshman year. It was then that I was certain that I wanted to continue my engineering education. I loved every minute of programming work. As I continued pursuing my electrical engineering degree, I found another class during my last semester, which I became very passionate about: Microprocessor Design and Architecture. This class provided my first dose of low-level programming. We focused on learning how to program IBM 8086 processors. It was one of the most challenging courses that I had taken, but it was also my favorite. I enjoyed the challenge of programming in such a rudimentary way and was amazed at

what one could accomplish. After I completed that course, I decided that I wanted to begin my career doing low-level firmware development.

Did your family and/or teachers provide encouragement? If so, how?

My family and teachers always encouraged me to follow my dreams. My mother always made sure I had plenty of books to read and made sure that I had resources available to me. My teachers made sure that I was given challenging assignments and remained in the top of my class.

Once I began my career at the University, my professors remained an integral part of my success. They not only challenged me with course material, but also gave me the opportunity to share my technical knowledge with others. I was the lead Teaching Assistant for the Electrical Engineering C Programming course my last year of college.

I was also very active in school activities and made sure that I secured internship assignments during summer breaks. I was an intern for a nuclear power plant from 1996-1998. I was responsible for designing and maintaining a certain set of electrical systems in the plant.

From 1998-1999, I participated in a research internship sponsored by the National Science Foundation. This research internship spanned two summers and an academic semester. I worked with six other undergraduates and several graduate students under the direction of Dr. Robin R. Murphy, designing artificial intelligence for urban search & rescue operations. We were awarded a scholarship from the Robotics Industrial Association in 1999 for our work and design of marsupial robots. We presented our work at an international robotics symposium in Seattle, WA in May 1999. Our paper was also published in the Proceedings of the Third Annual Conference on Autonomous Agents. The marsupial robots we worked with as part of our internship program were actually used in the excavation process for the Sept. 11 tragedy.

Have you had a mentor at any time during your career or life? What role did he or she play?

I have had several mentors throughout my education and career. As I mentioned previously, the earliest mentor I had was when I was fourteen years old as part of the Department of Defense apprenticeship program. During my various internships throughout college, I have also had

mentors and coaches to assist me. As a professional, I also have become very active in the mentoring program at IBM. To date, I have eight mentors throughout the company, and I am also serving as a mentor to four other individuals. Mentors help me by providing career coaching and development; they also provide advice and technical direction. I value my mentoring relationships, as I enjoy learning about the success strategies and experiences my mentors are able to share.