Cyber Smart CareerSpotlight

BY ACTUA

DR. CYNTHIA SUTHERLAND

CYBER SECURITY

Amazon Security Assurance Lead for the Government

I protect data on electronic devices to make sure it's only available to those who are authorized to use it and see it. My job is to teach people about how to protect their business and their privacy. I also work with engineers to help them understand the technology that goes into self-driving cars and buses and how they can configure it to be the most secure. I see STEM (science, technology, engineering and math) in every aspect of my cybersecurity career. Learning about the technology of a new self-driving car is fun, then applying cybersecurity technology to the self-driving car is even more fun!

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Describe your career path:

Originally, I wanted to teach algebra and calculus. I started a peer-tutoring program in high school to help other kids with math and English homework. I originally went to college to study secondary education so that I could become an algebra and calculus teacher but to achieve my dreams, I decided to join the army. From there, I got my Master's Degree in Network Security and my Doctorate in Cybersecurity. When I was in high school, cybersecurity didn't exist as a job. When I started working, it was called privacy & data security. As I was working for the army, my boss thought I would be good at cybersecurity and told me to try it — so I did!

What challenges have you faced and overcome in your career?

In my original pursuit of a teaching degree, I dropped out of college twice because I became a teenage mom when I was in high school. Being a single mom and living on welfare in college was extremely hard. I had to find a different way to achieve my dream of graduating from college so I joined the army. The army's computer and satellite classes gave me the knowledge and skills to get in and become successful in cybersecurity. I had to learn the hardware and software components of computers and how people use computers. Technology is always evolving and the way we use it evolves with it. I use technology every day, from my laptop to my TV to my electric car. New technologies are emerging because it's either faster, more convenient, or more cost-effective to rely on specific technologies and we see people using it in new ways. In cybersecurity, as long as you understand the hardware and software of technology, you will never be left behind.

What advice would you give youth?

I can't say which career paths to explore because as technology continues to evolve, the types of jobs will also evolve and new ones will appear. As you think about your future, explore careers in medical, technology and legal fields, as well as in public service. Then, find the one that you are passionate about.

Why does diversity and representation matter in cybersecurity matter?

In March 2023, I was asked to present during the annual Women in Cybersecurity Conference. I explained to 245 women how I navigated my career, being a cybersecurity professional. After my talk, three women came up to me to say that I had inspired them to stay in the field of cybersecurity. They had the reassurance they needed to know that someone had lived through similar experiences — they felt they were not alone in the adversity they experienced — and my guidance gave them a clear path to staying in the profession while managing their mental health. As a black woman, this field has been a challenge for me. However, I found others who look like me to help me navigate those challenges and be successful in my career. Representation matters when you are a minority from an underserved and underrepresented community.