My NASA Data - STEM Career Connections

Meet Shania Sanders, Computer Programmer

Job Title

computer programmer

Bio

How did you discover your passion for Earth Science?
I started learning about Earth Science as a NASA intern. I loved the fact that you could look at data on your computer and then walk outside and see what you were studying for yourself.

Where do you work and do you remember what it was like on your first day of work?
I work at NASA Langley Research Center as a computer programmer. I actually started out in the office I work in now as an intern. I was pretty excited because I had never worked at a research center before.

What do you enjoy most about what you do?
Having the ability to work on a lot of different projects is awesome.

What inspired you to work in this field?
High school robotics teams and collaborative projects with local universities inspired me to start working in STEM fields.

What are some of the most important lessons you have learned in your life?
Read the instructions or requirements for whatever you’re building or working on. And once you think you understand them, read them again. Don’t be afraid to ask questions.

What was the most difficult moment of your career? What did you learn?
I was an intern working on a research and development project for a particular type of communication
network. When it came time to test the network, I couldn’t get the testing setup right (which meant the project couldn’t move forward). Time for my internship was running out, and I really wanted to get the tests done to ensure that I actually understood the concepts I had been studying. One day, I sat down and thought about everything that went wrong. That’s when I realized that I had been so determined on making one method work that I hadn’t considered trying a completely new approach. I thought that giving up on that one approach meant I was quitting. I completely redesigned the testing approach and was able to finish everything. In the end, I learned that admitting something doesn’t work isn’t quitting. Sometimes you just have to take a different approach to get to your goal.

**Who has been the biggest influence on your life, and what lessons did they teach you?**
My mom and my mentors have had the biggest influence on my life. They taught me that whenever you approach a challenge, approach it with integrity, patience, and a positive attitude.

**How has your career been different than what you’d imagined?**
When I graduated from high school, my goal was to get a dual degree in mechanical engineering and history. I ended up with a Master’s degree in Computer Science, I’m working on my MBA, and I work as a computer programmer. So things definitely didn’t turn out like I thought they would, but I don’t regret it. I’ve learned more than I could have ever imagined by becoming a computer scientist.

**What does your future hold?**
I have no idea! I can say that I’m pretty excited about the different things I’ll learn and the people I’ll get to work with.

**What one piece of advice would you like to pass on to the next generation?**
Don’t quit. If you don’t have the skills to follow up with something you’re interested in, go out and learn what is necessary to gain that skill. If you don’t feel like you’re good at what you do, keep practicing. If you don’t have the tools to make something you think would be cool, make the tools yourself. There are no limits in STEM. So whenever you think that you’ve gotten to a point to where your goal is impossible, try a new path or make a new one. But whatever you do, don’t quit.

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