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“Engineering is using what you have on hand to solve a problem or make something work better.”



1. Tell us about yourself and your role at AMD.

I am an engineer that likes learning, teaching, and making things work better. Today, I leverage my experience designing elements for CPUs to help communicate design requirements and technology capabilities between design teams and the foundries who manufacture our chips. I grew up in Illinois and Florida, went to university in North Carolina, and moved to Texas to take my first engineering job. Over the course of my career, I have travelled to England, Taiwan and many places in the US to meet with other engineers.

2. When did you know you wanted to go into STEM and what inspired you?

My mother was a science teacher and so STEM was always a part of my life. On summer vacation, we would do “fish dissection” which I only later in life figured out was really just cleaning fish for dinner. At

my first birthday party after we moved to Florida, I received a chemistry kit, and it was a big hit. It is good to have a circle of friends who share your interests.



3. What do you like about working in semiconductors?

We are at a very interesting point in the advance of semiconductors. Everything has gotten really small! We are making things that are 20-30 nanometers big (a red blood cell is 6000 to 8000 nanometers big). This requires really fancy solutions to use the light wavelengths available to print structures and to avoid problems due to having just a few atoms of the materials you are building the structure from, instead of hundreds of atoms. It is challenging and you must use your imagination to think about how different components work and then work together.

4. What has been your biggest challenge and how do you overcome hurdles?

The neat thing about the real world is when you do not know how to do something or hit something hard, you can ask others with more knowledge or experience for help. One of my biggest challenges has been being just a little off target on either my education (since most my course work was in biology or biomedical engineering rather than computer science or semiconductors) or experience. To overcome this, I get to know people easily, ask a lot of questions, and share the information that I know as trade for their help.

5. What advice would you like to give students who want to pursue a career in STEM?

Students should start by learning the basics (arithmetic, basic science, grammar) as everything builds on them. Next, challenge yourself with the harder and more interesting topics. Seek out friends who share your interests and who are encouraging. Discard acquaintances who always have something bad to say about you or who discourage your dreams.