

STEM SPOTLIGHT

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Q How did you select your college major?

A I love solving problems. I love finding out about how things work. I notice small details. I like to make things work better. When I was in college, I couldn't tell you exactly what I wanted to work on, what I wanted to do specifically, or where I saw myself in 5 years (even though everyone tells you you're supposed to know!) Mechanical engineering is the most broad type of engineering for someone like me – someone who knows they're geared towards engineering but isn't entirely sure what specific industry they want to go into. Mechanical engineers are in practically every industry. My dad and sister are mechanical engineers that work in heating, ventilation, and air conditioning. My husband is a mechanical engineer who creates computer models of buildings to analyze how much energy they use. Friends of mine who studied mechanical engineering are now in medical school, work as



patent lawyers, physics teachers, or project managers. Some design solar panels, others electric cars, and others medical devices. My mom tells me that the best anesthesiologist she worked with majored in mechanical engineering. It was an easy decision because mechanical engineering truly prepares you for anything.

Q What was the biggest influence in your selection of major/career?

A I had several influences, but I think the biggest one was my family. My mom worked in the health sciences as an anesthetist so could always help me with math and science questions I had in school, my dad worked as a mechanical engineer and was always tinkering and fixing things, and my older sister, who was also inclined in math and science, started at Georgia Tech studying mechanical engineering when I as a freshman in high school. Since I saw science and math in action at home, I was encouraged and inspired to go down that path.

Q If you could go back to high school and select any elective course to take that would have better prepared you for college, what would it be?

A One course that I *did* take in high school that I'm incredibly happy that I took that prepared me for college (and even my job!) is drafting. I learned by-hand drafting, which is really more like art and trains you to see in three dimensions, then AutoCAD. When it came to a similar class in college I was confident because I was familiar with the concepts and techniques. I do wish I had taken a robotics class in high school. I don't work in robotics now, but I think it would have prepared me better for design and really getting hands-on design and building experience. To be a good engineer of an entire system, even if you are just responsible for the mechanical side, knowing at least a little about the electrical and software development part is very advantageous. Getting exposed to that early on would definitely be a benefit.

Q What is your favorite aspect of your job?

A I love going from ideation to creation. I also love knowing that what I design must be easy and simple for those who make it, ship it, install it, use it, and dispose of it. It's a game of compromises and trade-offs, but I love it!

Q How do you/your company make a positive impact on society/our community?

A When I started working for an elevator company, I didn't realize how much the product that I worked on impacted people [real people!] until I started talking to people about what I did. Every person I talked to had a personal story of a frightful or less-than-great experience they had on an elevator. People use elevators every day and they should be transported safely and reliably. Engineers in general have a responsibility to serve the public and make products and services that are



safe and enjoyable for the user. I'd say that's a pretty cool direct impact on society.

Q What is the most interesting thing you have been able to do in your career?

A I've worked in two different industries in my career. The first industry was in medical devices and I was able to travel around the country and even to Ireland to labs and conferences. I was able to meet with some of

the world's best surgeons to discuss designs for innovative medical therapies. I haven't been in my current position for long, but in the future I will be able to travel to construction job sites around the country and help install the products I design as well as attend conferences to learn about current best practices in the industry.

Q What makes you get up each morning excited about your profession?

A Every day I get to solve a problem, either on my own or with a team. The problems I solve are translated quickly to a physical design solution. The people I work with are driven and passionate too, so working in that kind of environment makes going to work very easy.

Q What advice would you like to share with K-12 students who are considering your profession?

A Don't be intimidated about engineering! Even if something looks really complicated, if you break it down into smaller and smaller components, you'll see that nothing is magic and it all makes sense. Mechanical systems (basically anything that moves) involve several trial and error attempts; failure while developing is accepted and encouraged because it always means that you learned something and got one step closer to the optimal design.

