

Optical design business promotes gender equity

Zemax has a work culture that supports women and families

The engineering team at SPIE corporate member Zemax has an equal number of men and women, a rarity at technology companies. In addition to this gender balance, women engineers at Zemax earn pay equal to their male counterparts. *SPIE Professional* asked Alison Yates, director of virtual prototyping, and Isis Peguero, an optomechanical engineer, how the optical design software company achieved gender balance and what advice they could offer other organizations.



Alison Yates

Isis Peguero

How did Zemax achieve 50% gender balance among optical and mechanical engineers?

ALISON: Some of it happened by chance, and some from hard work. When I started hiring early in my career, I found myself hesitant to hire a strong female candidate because I thought her vocal qualities made her sound young and sweet. I thought, “She can’t talk on the phone to our customers; they’ll never take her seriously.” And then I stopped dead in my tracks. I realized my own bias and decided absolutely I should hire her. Nothing says an engineer can’t sound like a woman. If customers don’t take her seriously when she says hello, they will quickly see that she knows her stuff.

I frequently ask candidates what got them into the fields of science, technology, engineering, and math (STEM). Nearly every time, they say they identified with a professor or other mentor. For female candidates, that mentor is often a woman. I often recruit at universities, and I believe that students who see a woman in an executive leadership role realize that Zemax is a place where women aren’t held back.

Why don’t more companies achieve gender balance on their engineering teams?

ISIS: Well, there are many obstacles. Not enough women are studying STEM — not because they can’t do it but because they might not have the support they need to believe they can. That was the case for me. Being a Mexican woman in engineering, I didn’t have role models who looked like me, and that was difficult.

ALISON: I agree. The biggest problem is not having a good pipeline of qualified job candidates with a STEM background. Hidden biases also play a big role.

Tell us more about hidden biases.

ALISON: Both men and women can have hidden gender biases. For instance, some women are so accustomed to being the only “smart girl” in the room that seeing other intelligent women might cause them to feel threatened or insecure about losing this unique identity. Men sometimes inadvertently discount women by asking them to do things like take notes or bring coffee to a meeting. Sometimes it’s more blatant. For example, I was once asked in an interview, “You don’t plan to have kids soon, do you?” If we’re not willing to take a critical look at ourselves as leaders, recruiters, and coworkers, achieving gender balance will be difficult.

ISIS: When it comes to hiring, bias plays a big role. It all starts with the name on the resume. When I applied for jobs after graduating with a BS, I got more callbacks when I used my first initial instead of my full name. I even sent two almost identical resumes to a few companies a few months apart. I got callbacks only after I sent the one without my full name.

What are some of the workforce challenges facing Zemax?

ISIS: I’d love to see more people of color, both in engineering and leadership roles. We also struggle to recruit women developers. Additionally, we need to ensure that everyone is given the same opportunities, such as challenging assignments. We all want to learn and grow.

ALISON: I’d say we’ve made some great strides. In the last year, we created a parental leave policy, and I’m hopeful that this helps all our engineers build the families they want.

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What can other companies do to improve their gender balance?

ALISON & ISIS:

- Sit down with your colleagues or boss and talk about these things. Members of the leadership team must call each other out when they see bias or unfair treatment. If your director or supervisor says something dismissive or inappropriate, talk to them one-on-one about it.
- Encourage open communication with people from underrepresented groups. Their voices are often drowned out. Just ask "What do you think, Isis?"
- Have candid discussions about employee performance and career trajectories with people you manage. Data shows that women are less likely to ask for a raise or a promotion, so make sure you actively seek to understand everyone's career interests and encourage them to be vocal.
- Review employee pay and promotions regularly. As the annual SPIE salary reports show, women start at equal pay early in their career, but lose ground quickly.
- Create a parental leave policy. I can't stress this enough. Having a baby is not a vacation. Don't make women choose between having a career and a family. Create an awesome workplace culture and it will draw them back! ■

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