

Conference Reports

2012 USENIX Women in Advanced Computing Summit (WiAC '12)

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Panel Strategies for a Successful Career in Computing

Summarized by Rik Farrow (rik@usenix.org)

Moderator: Rikki Endsley, *USENIX*
Jennifer Ash-Poole, *AdNet Systems/NASA GSFC*
Jessica McKellar, *Project Lead, Ksplice Group, Oracle*
Sherry Moore, *Software Engineer, Google*
Margo Seltzer, *Harvard School of Engineering and Applied Sciences*

Rikki Endsley: Once you have been in a field for a while, you collect bits of wisdom along the way. What do you wish you would have known then that you know now?

Sherry Moore: As a female engineer, you need to market yourself. The well-respected way is to tell people about the hard problems you have been solving, then share the solution. I wish I had known this way back when I joined Sun.

Margo Seltzer: One piece of advice is to be confident enough to ask questions. When I was a young engineer at Stratus, I put a busy-wait loop in the kernel. When my boss noticed that, she asked me why hadn't I asked someone about kernel programming, which I didn't fundamentally understand at that point. You need to be really smart to know what questions to ask.

Jessica McKellar: If there are opportunities presented, just say yes to them. Commit to the conference talk, go to the dangerous startup. Just say "yes."

Rikki Endsley: What is your experience with being a woman in a male-dominated world?

Jessica McKellar: In the startup scene, the situation has gotten better. If they want to succeed, they want the best person, and that may be you. The places where people assume I'm in HR are conferences and on the Internet.

Rikki Endsley: I started [working in IT] in my 20s in journalism. What changes do you see for younger women now?

Margo Seltzer: I made my own fortune, my own way. I had two older brothers, both bested by girls who were the valedictorians. I grew up thinking I had to be the smart girl. But I have also met idiots. At the first company I worked at after college, we had a coffee club where a guy named Alan bought the cream and I bought the coffee. Then a new guy joins the coffee club, and comes into my office and says there's no cream.

Twice. He won't ask Alan, but he wants me to serve him. I went to my boss and asked him "to fix this," and the guy got reprimanded. That was one of those situations that could have gotten out of control if I had let it. This was in 1983. So there's a lot of power you can bring in not accepting things that are not okay.

Jennifer Ash-Poole: I'm the exception that proves the rule. When I started, women outnumbered men on sysadmin teams 2-to-1, but things are more equal now, so things have changed. I started out as a physics major, where I was the "only girl," so I learned how to deal with it.

Sherry Moore: When I went to a college in China, they had a communist slogan: "Women hold up half the sky," so I never experienced any of this until I started my graduate degree in the US. I was one of only two women in the engineering program. I now have a 14-year-old daughter, and I let her know that she should be expected to do just as well. At Sun, I was the only girl in the kernel group, and I don't think anyone treated me differently.

Rikki Endsley: I want to talk about imposture syndrome, the feeling that people will figure out that you are a fraud, and don't know what you are doing. Have you had those experiences in your career?

Sherry Moore: One line that I liked was saying to myself, "Fake it 'til you make it." I worked the whole programming stack, and I found I really needed to believe that I could do it. For example, I might not know the answer now, but I can figure it out.

Jessica McKellar: I acutely feel that I am playing catch up, and that motivates me because I didn't start programming until I was in college. Once you stack up enough data points, you can convince yourself that you know that you can do it.

Sherry Moore: When I started in grad school, my husband was the lead sysadmin. One day the big server went down. Since I was brand new, I had to do all the typing. He told me to type this and type that. And when I responded, "It's still not working," he said, "Well, I guess I don't know." I realized that he was faking it, too.

Lois Bennett: All through grad school in Harvard, I realized that the more I knew, the more I knew I didn't know.

Rikki Endsley: Along the same lines, let's talk about speaking up. Earlier in my career, I didn't want to speak up. What has your experience been with speaking up in your career?

Margo Seltzer: I never had the problem of not speaking up. One of my friends was in a group. She would speak up and be ignored. When a guy said the same thing she said, the advisor would agree it was a good idea. This went on until some other guy in the group pointed this behavior out to the advisor. Part of our job is to observe and point it out for other people. That's one of the things you can do for your female colleagues. When it comes from a third party, it is more effective.

Jennifer Ash-Poole: I was about to quit a non-profit board and told them that when I say something I get ignored. And the board VP came up and asked me, "Really?" After that, I was more heard. I had to speak up for myself as the seven guys on the board didn't have a clue.

Sherry Moore: People always look to the best dressed person in the room, and I make sure I am that person so they will look to me for acknowledgment.

Jessica McKellar: I brought a bunch of high school kids to Google to show them how great it was and to talk about some topics. The girls stayed in the back during the tour and when we were talking to engineers. So it starts really early not learning to step forward.

Margo Seltzer: My 14-year-old son plays World of Warcraft, and I discovered that his avatar voice is a 28-year-old woman. When I asked him why, he said that if you're a guy, they tell you to shut up. But if you're a woman, they listen to you. He leads raids in WoW.

Jessica McKellar: I do a lot of STEM volunteering, and I ask girls if anyone ever tells them they can't do science. And they laugh at me. They have confidence in their abilities and know that opportunities are available to them.

Jennifer Ash-Poole: I just did a talk at a middle school about model rockets, and girls asked me about being astronauts. They came up to me because I was female, not to my co-worker, Kevin. They build rockets, do math, and still do girl things. They need to know they are not weird, and that it is okay to do these things.

Sherry Moore: As I mentioned, I have a 14-year-old daughter. I try to be a good model, and bring her to work and to conferences so she knows it is possible. I really hope this stays with her, that she can really be good at anything she wants to be.

Rikki Endsley: How does someone go about finding a mentor?

Margo Seltzer: The first person I could describe as a mentor totally believed in me, and thought I was really good. My advisor, well, I think I looked a lot like his wife, and that might have been a problem. But when I was first a professor at Harvard, the tenured professors would look out for me and help me. Now I am tenured, and can do that for others.

Jennifer Ash-Poole: I was bored with what I was doing, and I got assigned to work for someone in a different branch. He told me to find out what I wanted to do. I decided to try sys-admin, and after six months, it worked out. Circle mentoring really works—finding someone not in your command chain that can look at you with fresh eyes.

Jessica McKellar: I was a really serious little kid, waiting for the school bus when I was only two. Fortunately, they had tech teachers at the schools I attended. My math teacher in high school was a woman, and my chem teachers, too. The system worked for me.

Rikki Endsley: When Sherry Moore was talking about dressing up so that people would look up to her, I wondered how the rest of you feel about how your appearance affects how you are treated in the workplace?

Jessica McKellar: Not being identified as a booth-babe is really important to me. At work, I dress like Steve Jobs did every day.

Margo Seltzer: I actually wear a dress often because I want to send the message that it is actually okay. One of my students went to work for a consulting firm, and one of her teammates told her that dressing fashionably, as she did, was really inappropriate. If you want to be taken seriously, looking too good can be detrimental.

Sherry Moore: When I go to a conference, I try and look more respectable, and this has always worked for me.

Jennifer Ash-Poole: If I appeared at work dressed up, people would ask me when the job interview is. I did wear a dress for my wedding. Where I work, only the scientists dress up.

Sherry Moore: When guys want to stand out, they dress up. I asked one guy why he wore a tie when he went to the kernel group meeting, and he said he wanted people to remember the person with the tie.

Rikki Endsley: I know about two people, a male and a female, who both interviewed for and got a similar job, but the guy got paid more. When I asked about it, the answer was, "He asked for more."

Margo Seltzer: Go read the book *Women Don't Ask*. Order it now, and read it before you go to your next job interview. I have a friend who is a soccer team mom and also one of the best sports producers in the country. I sat her down and told her the reasons she could ask for everything she wanted. She did, and she got what she asked for.

Cat Allman: When I went to work at Google, the accepted wisdom was nobody gets to work at home. I asked for two days a week working at home, and I got it.

Jennifer Ash-Poole: I now make more money than my husband. I remember being in the high school choir, and the director would say, "Let's shoot for the sun!" Then, if you only get to the moon, that is still more than what you'd get shooting for the moon.

Jessica McKellar: I had a boyfriend in college who told me something about how to negotiate, and when I went to interview for an internship, I actually negotiated a better deal than anyone else got.

Sherry Moore: In Beijing silk markets, sellers will ask you to pay 200%, and buyers counter-offer 10%. Then they go to the next vendor, try 20%, and keep trying this approach until they find out what the real price is.

Audience member: I thought I would be a pioneer, and have all these women following me. Do you think it will always be like this?

Margo Seltzer: The numbers are appalling. If you look at countries like China, you can see that it doesn't have to be this way. Even in Europe it is better. Personally, one thing we can do to make it better in the US is to change the STEM culture. Another thing is to realize that we don't have to make sacrifices to get certain jobs. One of the best engineers I know works 20 hours a week, and gets more work done in that time than most of my male co-workers.

Jennifer Ash-Poole: I see this at NASA Goddard, where people are choosing to do things for their kids, and take time out to support both their kids and their spouses.

Margo Seltzer: It is important to be confident in yourself. I am the first woman in Harvard engineering to have a child and just the second woman in engineering. I brought my child to work with me for the first seven months. Think outside the box; figure out what works for you. Feel free to make decisions that work for you.

Jennifer Ash-Poole: I like to joke with my manager that I am going to work an alternate work schedule or I am going to go postal. I don't have children but I have other obligations, like my rocket children. In order for me to do that you need to let me have every other Friday off.

Margo Seltzer: I have some homework for you. Go to your company or organization's Web site and look at the pictures and images there, then ask yourself, what do they say about women in your organization. I checked out EMC's and was not overly impressed. I was not impressed by the Oracle Web site either, where you mostly see men talking to women. Look for the messages about women, and the gender ratio.

One more thing. When your organization sends women out to recruit wearing men's shirts, it sends messages like "We're

guys." Buy women women's shirts, or don't be shocked you don't recruit any women.

Editor: Watch the full Strategies for a Successful Career in Computing panel discussion video online at: <https://www.usenix.org/conference/wiac12/strategies-successful-career-computing>.