

Kristina Kelly: Hi, I'm Kristina Kelly. I'm a network engineer at NC State University. My group manages, monitors, and supports the wired and wireless networks and the daily operational tasks included in supporting those networks, the security, DNS, DHCP, IPM administration and the traditional and IP telephony, as well as data center operations.

[00:00:30] I spend a lot of time getting to my current position. I really enjoy the technical and strategic role that I'm in currently. I actually feel that if I end up in another role, it will continue to be in higher education, but my end goal is to become a teacher or some sort of a mentor [00:01:00] to students so that I can combine my role as a technical resource with my desire to do knowledge management.

After many years working in the service industry, I decided to get an administrative assistant position at Tulane University. We had a computer tech who was very hard to get ahold of, so we would [00:01:30] bribe him with cookies, and cokes, and candy. So when he came to fix our computers, I wanted him to show me what he was doing so that we wouldn't constantly have to depend on him. And I picked it up pretty quickly. And when he left, they offered me his position as the computer tech for the department. I was super green, but luckily, there were two other computer techs in the building that were also super green and we all worked together to build our skills.

Very [00:02:00] green when I started network engineering, needed to understand the skills behind network engineering. I had a really good base of computer support, so spent four or five years as a network analyst in our network operations center, that's our NOC. Worked there for five years, was promoted to our network engineer for wireless with a focus on wireless. Spent a couple of years there, but [00:02:30] my heart was always in the NOC. So I was promoted again to the network operations manager.

I would definitely encourage people with liberal arts degrees or English degrees or even history degrees to learn about information technology. I think the skills that we learn in those degrees [00:03:00] allow you to sort of think out of the box.

I think the skills that you need as a network engineer, obviously the technical skills are important, but that hunger to learn, never stop learning. You're constantly bombarded by new technology, new infrastructure, new ways to do things. So you need to be open to learning [00:03:30] the new things that come along.

So I really think that certifications are important. I think that a lot of folks that get positions at our organization have gone out and done the work of certifications, not necessarily because you know everything once you get a certification, but it shows that you [00:04:00] can actually spend the time, learn the information, and then be able to give that information out.

I also think that the desire to grow. You might take a job that is an entry level job and that might not fit with where you want to go, but every entry level position gives you the opportunity to move up, to learn new skills, to be able to get to where you want to go. So everything's [00:04:30] a stepping stone. So I always think that never turn down any opportunity that's offered to you because you might be able to get to that next step of your career goals.

I think the critical thinking piece is important because a lot of times you are trying to determine what a problem is. It's always the network. If someone has a problem, it's always the network. [00:05:00] So your job is to prove that it might not be the network. I think that humility goes a long way in our job because it is easy to say, this is not my problem, but being able to work with other groups and a community determine, "Well, it's not AD, DNS is fine. This is looking [00:05:30] good. Let me look at the network side of things as well." It could be a bunch of things in a problem. Every technology that we work with as a network engineer has its basis in routing and switching, but grows from there. So I think really being able to interact and work with your other network engineers is really important.

So [00:06:00] a day in the life of a network engineer at my organization is coming into work, checking email, checking in with people, determining the priority problem for the day or the priority problems for the day so that we can start to resolve any issues, get back to any customers that need attention, allocate the resources. So if we have other people requesting things, "Who's the best [00:06:30] person for that job?" Either they have the best technical skills, the best communication skills, a mix of both.

The best part of your day or my day is the water cooler talks. We don't really have a water cooler, but hallway conversations. Such-and-such is talking about something, "Oh, that's something I'm interested in." So we can go and have an impromptu conversation about this certain thing and finishing up on any sort [00:07:00] of work that we have. Meetings, we have lots of different meetings with my employees, with other managers, with engineers. We have a weekly senior engineering meeting where everybody just gets together and talks about the projects that they're working on, and we have questions you can ask that time. So I think that those things are probably make up the majority of my day, unless there's again, some major outage that [00:07:30] we have to all stop and that really then stops everything you're doing and then focusing on that until it's resolved.

My advice to anyone looking to get into cybersecurity or network engineering is that you should do it. There's no special skillset that somebody needs. You don't really have to be great at math [00:08:00] or, "Oh, this person is wonderful at science." The job that we do is really hands-on, and I feel like with the right training, the right teachers, the right certification and the will to learn, that anybody can be a network analyst or a security analyst. That these skills are learnable by all, [00:08:30] and that we just need to be able to tell people,

"Come take the classes, learn the skills, and apply them." There are so many jobs that are available that are right for people.

And so I think it's just really important not to get scared off from this idea of, "Oh, it's technical and I didn't really do well in math" or, "I'm not science-minded." I have an English degree. I think it's a field for [00:09:00] everybody and I would love to see more people join the field, especially women and minorities. I think that diversity and having people come into these fields is something that we need more of.