

CyberFirst Podcasts

Diversity and Inclusion in Cyber Security transcript

[00:00:00] Michala: Cybersecurity is an increasingly more diverse industry. It's a fast-growing industry with roles that protect the UK, and skills that will always be in high demand, and diversity of thought is invaluable at all levels. In this episode of the *CyberFirst Podcast*, we're going to have a frank and open discussion about the need for diversity in cybersecurity. Our panel of guests will be sharing their first-hand insight into how they felt supported and included on the CyberFirst University Bursary and Degree Apprenticeship Schemes. I'm Michala, a CSO advisor and information governance and cybersecurity consultant. Today, I'm joined by.

[00:00:38] Jane: I'm Jane, I have just graduated from my degree in mathematics and have secured a job through the CyberFirst Bursary Scheme.

[00:00:44] Arron: I'm Arron. I study computer science, and I'm now doing a master's in cybersecurity. I've secured a job through the CyberFirst Bursary Scheme.

[00:00:51] James: I'm James. I'm studying computer networks and cyber security at University, and I'm currently on a summer placement as a CyberFirst bursary student.

[00:00:59] Michala: We're also joined by Elena, Tom, and Kitty.

[00:01:02] Elena: Hi, I'm Elena. I'm a third-year CyberFirst apprentice.

[00:01:06] Tom: Hello, I'm Tom. I'm also a degree apprentice.

[00:01:08] Kitty: I'm Kitty and I'm also a CyberFirst degree apprentice.

[00:01:12] Michala: Diversity and inclusion. Sometimes these feel like buzzwords but there's a real focus on ensuring both within the cybersecurity community. To get us started, I want to know how you've all experienced this within your roles. Let's begin by chatting about why diversity is so important in cyber security.

[00:01:31] Arron: People from different backgrounds speak in different ways and think in different ways and that's a really different way of coming up with new ideas, so diversity in a team will increase the number of ideas and the, what word I'm I looking for, yes, standard and quality, that's what I'm looking for, of ideas.

[00:01:47] Tom: Especially looking at the different neuro diversities, having different brains really encourages different ways of thinking and by allowing this, you're going to have

different solutions and approaches to the same problems. Some of which might work better and be more efficient, that another person might not have thought of previously.

[00:02:03] Michala: Yes, absolutely. There's a huge focus on that within cyber security at the moment actually. How about just as a female working in this space, how have you found that Jane, because you've obviously gone through this whole process, and you've probably seen a change from when you started to where you are now?

[00:02:22] Jane: Yes, when I joined the scheme, I think they're only about 20% female, 20%, 25%, whereas I've seen massive uptake and they are close to 50% now.

[00:02:30] James: I think diversity is extremely important, of course, in cyber, and really all those surrounding workplaces. For me, personally, I have Asperger's syndrome, so I'm on the autistic spectrum. I find that sometimes I can come up with solutions that are slightly different to some of my colleagues. Sometimes that can be for a variety of reasons, really, I suppose that people have different traits with different conditions, and I suppose that some of those can work in your favor in certain situations, and so being able to bring what I can bring to the table but then also actually, understanding other people as well, then understanding their perspective can help with some of the difficulties I naturally face.

[00:03:21] Michala: Thank you for sharing that. The University Bursary Scheme and Degree Apprenticeship is open to everyone and designed to help young people from all backgrounds to start their cyber security career on an equal footing. To you all, would you say that the CyberFirst programs really are open with equal opportunities for everyone? Jane, would you like to start?

[00:03:45] Jane: Yes. I would say absolutely. They never specifically target people and say, "You've got to do this job," or, "We think this opportunity is right for you." It's an open forum, everyone's included in the forum and can discuss pretty much anything they're interested in and get involved in anything they want to.

[00:04:03] Arron: I would completely agree with that 100%, especially when applying for a placement on the bursary, you give no features about yourself. You're only based on your merits, not on who you are as a person at all.

[00:04:15] Elena: Yes. It's the same on the apprenticeship as well. When applying for your third-year placement, you just submit a form saying I would like to use these skills. They know nothing about you. When the placement teams then come round to reading your documents, they don't know if you're Black, White, straight, gay, male, female, all they know is that you got an interest in this, and you have the drive to actually want to achieve, and that's what matters out of everything in any job within cyber is so long as you've got that drive and that ambition, then that's going to get you more places than anything else is going to.

[00:04:52] Michael: Absolutely. I'd just like to add on to that that being able to demonstrate that passion, that enthusiasm for the field goes so far when you're applying for jobs. It really does.

[00:05:03] Kitty: Yes, there definitely is equal opportunities. I think the important thing to note is that they don't want the same person. They don't want 60 of the same people because you're going to get 60 of the same results. They do want people from diverse backgrounds because everyone provides something different.

[00:05:19] Tom: I'd absolutely agree as well, whilst you're on the placements in the apprenticeship, they encourage you to go out and talk to other teams. These teams, if you like them, you can put them forward to potentially be your placement. They won't look at you in terms of your appearance. They will look at you based on your merits, your drive, and the most important thing they want is for you to have a passion in the area to learn because that is something they value more than anything. If you've got the drive, you'll do well whereas if you don't enjoy it, you're probably not as likely to do as well.

[00:05:51] Michala: Absolutely agree with you. I always say to people who are looking at a career in cyber security, "Do you enjoy learning? Do you enjoy learning on your own time and not being paid to learn? Because if you don't this is not the field for you." [chuckles] The NCSC and GCHQ are taking great strides to ensure everyone feels supported and included but let's dig a little deeper. How have you all felt supported in achieving your goals? On the programs, are you encouraged to share your ambitions, and are any steps taken to actually help you get there?

[00:06:25] Arron: Yes, I feel supported, and you are encouraged to share your ambitions. If you undertake placement, you almost keep a log of the things that you've done and you write a report at the end of it based on your experiences and what you've learned, and what you've taken away from that placement. I feel as though that encourages you not only to experience new things on the placements but also to think about where your future is going to take you or whether you liked the placement and that's where you want to go in the future.

[00:06:50] James: Absolutely. Then also being in the community as well, you can very openly talk to other members of that community. If you're interested in a particular area, there's more than likely somebody else that's in that community who also has that same interest, so you can build ideas together and have that contact which you might not otherwise have.

[00:07:10] Jane: I found within the Scottish-English divide that there's not so much available in Scotland. If there is, it's very confined to Edinburgh. I've reached out to some of the team members and said, "Look, I'd love to go on this project. I'd love to bring more cyber education to the Scottish school system." I've had multiple calls. We've organized that. I've talked to both the alumni and current CyberFirst bursary students and we've come up with a sort of idea to hopefully build a charity one time and go into these coding clubs that already exist and bring the Scottish cyber education up north as well.

[00:07:45] Michala: That's wonderful. I wish you all the best with that. Great. How about you, Elena?

[00:07:50] Elena: Yes, I think within GCHQ especially there is such a drive for everybody no matter your background that there is some way that you feel supported. There's Pride

networks, there's networks for minority ethnicities and people who are neurodiverse and everything. It doesn't matter if, say, you're an ally or if you're a part of the LGBT+ community, there's going to be somewhere for you to go and meet people and feel supported. If you've got any issues, then the support for I guess protected characteristics is so good.

I think as an apprentice as well, you're never scared to reach out to those communities because you're never treated like you're less than everybody else. You are a colleague of everybody else. If you want to join one of the networks and get involved in the stuff that they do, then you're more than welcome to.

[00:08:50] Michala: No, that's great. How about you, Tom?

[00:08:52] Tom: I'd absolutely agree with that. From a personal point, I've used one of the affinity groups which supports the characteristics and the support that you get from them is amazing. They're always trying to do anything they can to make sure that you feel the most comfortable and capable so that nothing hinders your performance and you can still have all the support to be the best you can be.

[00:09:14] Michala: It really does sound quite amazing in terms of the level of support that's available for you. Did you find that to be the case as well, Kitty?

[00:09:20] Kitty: Yes, definitely, and I think it's also worth noting that the support is for both inside and outside of work. It doesn't have to just be for something that's going on at work. It's really about making you feel comfortable in just life in general.

[00:09:36] Michala: I've learned a lot from all of you so far and I'm sure our listeners have as well. I'd like to give you a chance to ask me anything about my career in cyber security. Who would like to go first? I feel like I'm in the black chair, lights coming down.

[laughter]

[00:09:53] Kitty: I did have a question. Is there anything that you know now that you wish you knew at the start of your career?

[00:09:59] Michala: Be willing to talk, get a mentor to support you on the career journey, and love yourself.

[00:10:06] Jane: Has your career been straightforward or is there anything that you've found quite difficult to encounter along the way?

[00:10:13] Michala: Yes, lots of difficulties along the way. When I was at school, it was always the case of do I do classical music or do I do computing, and I went with a classical music degree. Then when I finished my degree I opened a computer games shop because I'm a gamer. I then relooked at what I wanted to do with my career. Eventually, I found my way into a local council on the IT support desk as a help desk operator. Three months later, I was doing IT support as an engineer. Then let's skip forward many years. [chuckles] I eventually came around to discovering something about cybersecurity.

It was sold to me as data classification, "Michala, would you like to go for this new role in data classification?" I was like, "No, thank you. That sounds really boring. No, leave that alone." Then the boss came and did a sales job on me and explained that actually, it was about how to protect people's information. Obviously, at a council, you've got lots of different types of information in all different departments. When he did that sales job on me, that worked and I went and did the job, and that's basically been my decade ever since. Lots of challenges along the way from a health point of view with breast cancer, from a work point of view.

Given my age, so I grew up in the '70s, also from a racism point of view. Whether it's been school or work I've always been one of a handful if not the only Black person and certainly Black female when you to get cyber in the room. That was a very long-winded answer.

[00:11:51] Jane: I applaud you and your career and I think that's the very least we can all say.

[00:11:54] Arron: Definitely.

[00:11:55] Tom: Absolutely.

[00:11:55] Kitty: Absolutely.

[00:11:56] Arron: How would you say the opportunities have changed for Black females from when you first started your career in cybersecurity to now?

[00:12:04] Michala: Hugely changed, hugely. In particular, and again, it's about the networks and the people and the recognition that cybersecurity is important, so you've got a government's putting money into the field. For example, there's women's-only cyber security groups, there's a Blacks In Cyber security group. There's lots of things that are now coming together to support the different protected characteristics if you like. I would say it's far easier now. Again, there's lots of people who in cyber security now are getting into the mentoring side of things, and so it's easier for Black women to have access to that.

I think there's just lots and lots of opportunities now that weren't there when I was starting out, not at all. I have to say I'm quite jealous of all of you that you've been able to go through this CyberFirst scheme, I think it's wonderful.

[00:13:04] Jane: I think we're all very grateful to be here.

[00:13:06] Arron: Yes.

[00:13:06] Tom: Yes. What one piece of advice would you give to help me be successful in my career?

[00:13:12] Michala: Connect with people on LinkedIn, network, network, network. Don't be afraid to ask those questions. Get a mentor. [chuckles] Remember, you are all experiencing this, you could be mentors for the next cohort, so think about that as well. You don't have to have 20 years in the industry to mentor. Now that you've heard some of my advice, I want to hear what advice you'd give in a quick fire round. In 20 seconds, what advice would each

of you give to diverse candidates applying for the CyberFirst programs, and your time, Elena, starts now?

[00:13:50] Elena: I think I'd have to say more than anything, especially if you're a young female, is don't listen to what people say about you're only getting a job because you're a female because that isn't true. You're worth so much more than your gender appearance, so just don't listen to them. If you get the job, then it's because you're capable. It's not because you're a woman.

[00:14:12] Michala: Brilliant. Thank you very much. Arron?

[00:14:15] Arron: My sole advice would be if you aren't sure whether to go for it or not just go for it. Always go headfirst into it.

[00:14:23] Michala: Short and sweet, excellent, perfect. Kitty?

[00:14:26] Kitty: I'd say if a cyber career is something that you're interested in, just believe in yourself and that will help you along your way and help you to achieve your goals and go for it.

[00:14:37] Michala: Excellent. James?

[00:14:39] James: I just think if you if you have that drive and you have that real interest in it, I don't think that anything else should have any influence on that. It should just be about you and your drive and your interest in that.

[00:14:52] Jane: Jobs provide a checklist, you yourself are not a list, therefore, you cannot check the boxes. Just be you.

[00:14:59] Tom: You may feel that there are better people out there, but if you put the motivation in and the work, you will be that better person for the job.

[00:15:06] Michala: Thank you all for sharing your experiences and for that wonderful advice. There's much more to know though, and you can explore the CyberFirst University Bursary and Degree Apprenticeship schemes by heading to www.cyberfirstcareers.co.uk, where you'll find everything to help you decide which path is right for you. Thanks to all our guests and thanks to you for listening as we open up the world of cybersecurity.

[00:15:33] [END OF AUDIO]