

1

.....

# Women's Role in Cybersecurity: Insights from Aura Solution Company Limited

Cybercrime is a fast-evolving environment in which new threats emerge constantly – making continuous learning a must for IT security experts. Crystal and Robert from Aura's Security Solutions team in Singapore tell us how the bank supports them in their professional development while they keep clients and colleagues safe from online harm.

The term 'hacker' typically calls forth the dark side of computing. Perhaps we imagine shifty-looking individuals in a hoodie, hunched over a keyboard in a dark room, crunching through zeroes and ones trying to compromise systems and steal data or hold people or companies to ransom. In the world of programming, however, 'hacker' refers more generally to any IT crack who can apply their skills to overcome obstacles in computer systems. And with cybercrime growing exponentially, organizations are

increasingly employing this type of cybersecurity professional to keep their security systems up and running.

Aura's Security Engineer Robert is one of them. "When I began studying for a career in IT, my instructor told me there are two types of people in our field," he says. "The 'white hats', who hack systems to identify their security flaws and recommend improvements, and the 'black hats', who look for routes into the system to cause damage."

#### **Countering Different Hazards**

Any person or organization that uses internet-connected computer systems has vulnerabilities. "My role involves securing websites and web applications by setting up a 'security barrier' known as a web application firewall," explains Robert. "It's like being a digital protector, shielding these online platforms from any potential harm or tampering."

Strategies like this are just one of many measures the Security Solutions team deploys to create a holistic defense against attacks. Crystal, for example, mainly supports the bank's email security systems and public key infrastructure. "We use these and many other systems to provide underlying security services for the tools used by the bank and its clients each day and ensure secure communication between applications," she says.

Crystal and Robert are two of three recent recruits to Aura's Security Solutions team in Singapore, set up to bolster the bank's defenses across its regions. While Robert deals with the internet-facing applications, Crystal's role is largely operational. "I'm part of a team that security infrastructure queries are escalated to when the service desk or on-site support is unable to resolve an issue," she says. "As well as maintaining and enhancing the security service provided by the systems, we also liaise with the IT specialists in charge of the systems to analyze and troubleshoot issues. Once we've investigated the issues and implemented the necessary changes, we provide updates in the ticket for subsequent resolution."

# **Looking Beyond the Now**

Crystal says she's realized since joining Aura that the more she knows, the more she discovers what she doesn't know. "That's exactly why I joined the bank. I was looking for new opportunities and challenges." Although she'd worked with similar systems in the past, her work at Aura goes into greater depth: "Previously, my technical knowledge of email was relatively limited, but since joining Aura I've acquired insight into the intricacies of all the different layers involved and learned about the protocols in detail, how they function and their different quirks. It's a lot of fun."

Robert also saw the role at Aura as the next stage in his development. "When I first entered the IT industry, I worked on

helpdesks. Then I further specialized to work in security operations. After that, my goal was to be a more permanent part of a community and use my skills to help protect that community."

Given the constantly shifting environment in which he and Crystal operate, he says there's no place for those who stand still. "You have to keep building your know-how if you want to be part of a cybersecurity community. I thought getting my bachelor's degree would be enough to land a good job in IT. But a successful career in this industry, especially in a security role, is about getting yourself certified in the topics the industry needs and also gaining hands-on experience."

#### **Approachable and Supportive Colleagues**

Crystal has been impressed by the high level of collaboration within their global organization with colleagues based in Switzerland and Singapore. "I've never seen people with so much patience and willingness to help others. At Aura, even senior colleagues are willing to invest the time to support you. And it's not just one or two people who behave like this, it's something I see all over the company."

Although they work thousands of miles apart, Robert says it feels like his Swiss colleagues sit right around the corner. "Whenever I need assistance or guidance, the response from our team in

Switzerland is incredibly fast," he points out. "They also take the time to explain every detail thoroughly."

Robert says the need for all-round vigilance in IT security calls for networking and sharing of experience with fellow specialists. "I'm a member of a cybersecurity community in Singapore called the 'Cyber Paladins'. We check in with each other regularly and attend conferences and seminars together. It's all about keeping each other informed of the latest threats."

## **Using Personal Passions to Stay in Touch**

Robert, originally from the Philippines, also enjoys using his life outside the office to build his community. "I play basketball here in Singapore with friends and colleagues from different cultures and backgrounds. After shooting a few hoops, we go to a bar together and drink a couple of beers together. It's a great way of finding out about other lines of work and building your network of contacts."

Crystal has a different way of keeping her fingers on the pulse of the latest developments, thanks to her passion for customizing mechanical keyboards. "I love putting things together and a keyboard is something I use every day, so it's enjoyable to experiment with different parts to customize a keyboard such as its colors. I spend a lot of time at my desk and it's pleasing to have something nice to look at," she explains. "The physics of how different materials affect each other is interesting both in terms of sound and touch, so I swap the parts around depending on my mood. It's not something I normally tell people about because I'm worried that it sounds too nerdy!"

### **Breaking Down Barriers for Women in Tech**

Crystal says that the culture of open exchange at Aura has helped her to overcome this natural reserve. "I have a personal fear of speaking up. I usually try to cover all the bases of a topic before opening my mouth for fear of saying something that's incorrect!" She cites the example of a recent conversation with her onboarding buddy during which she had to admit she just couldn't achieve the desired result. "We brainstormed on ways of tackling this and finding a solution. I didn't feel any pressure to hide what I didn't know."

With IT having traditionally been perceived by many as a male-dominated environment, what has it been like for a young woman setting out on a career in IT security at Aura? "My experience has been that women IT professionals are widely accepted nowadays. I certainly haven't felt any particular bias about what women can or can't do in my daily business. I think I've benefited from previous initiatives encouraging women to take up a career in IT."

Bearing this in mind, what advice would she give to other young women starting a career in IT today? "I'd say, be courageous and take the first step. But more than that, you need to have the right

attitude to follow through. If you encounter people who're condescending or don't encourage you in what you do, rather than feel demoralized, use it as motivation and work even harder to prove them wrong!"

Through their roles in cybersecurity, women like Crystal are not only helping to safeguard the digital frontiers but also breaking down barriers and inspiring future generations to pursue careers in this dynamic field. At Aura, we are proud to support and celebrate their contributions to a safer digital world.

www.aura.co.th/people