

Diversity in Cybersecurity

Keep your organization safe
and #BeCyberSmart

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Cybersecurity has a problem

Today, there is a significant gap between the industry's 4 million unfilled positions and the number of qualified professionals who can fill them, often dubbed the "skills gap."

What's more, women make up less than one-quarter of the cybersecurity workforce.



“The industry needs to address the skills gap and bring greater visibility to women in cybersecurity if it’s ever going to address the gender and skills gaps it currently faces.

Forbes



Women in Security

In 2019, women make up about 20% of the global cybersecurity workforce. While this number has grown from the 11% statistic from 2012, it highlights that there is much more work to do on this journey. When we help our security community grow through our commitment to customer obsession, diversity, and inclusion, we will be all the more secure for our efforts.



What is Microsoft doing to address Diversity?





Building equitable pathways to cybersecurity jobs



Partnering to prepare students with skills for high-wage, high-growth careers

The challenge

Cyberattacks threaten our privacy, national security, and our daily lives. But we're not training or certifying enough students in cybersecurity to meet growing demands.

Annually, only 3% of US students are attaining a credential in computer and information sciences, and far fewer are specializing in cybersecurity.

Urgent action is needed to address the cybersecurity gap and protect critical public and private infrastructure.

The opportunity

With nearly 500,000 open cybersecurity roles in the US, skills in cybersecurity can help launch students into high-paying careers.

Community colleges play a critical role in preparing students for in-demand technical roles.

Together, we can build an inclusive pipeline of cybersecurity professionals that can quickly enter and succeed in today's rapidly evolving cyber workforce.

Our commitment

Microsoft will help skill 250,000 people in cybersecurity by 2025—starting with new community college and nonprofit partnerships—to cut the US talent gap by 50%.

One of the biggest challenges facing the security industry today is adding more diversity to its ranks. The demand for qualified security professionals continues to grow in this traditionally male-dominated industry, and though men currently outnumber women in the field, we are now seeing a steady growth in the inclusion rate.

Security executives who recognize the correlation between diversity and business success are now actively promoting and recruiting women.

Microsoft's mission statement "empowering every person and every organization on the planet to achieve more" is reflected in Microsoft's hiring policy, which aims to hire staff that represent everyone on the planet, and that goal is the same for the Global Security team.

"I feel blessed to be where I am in this field. I worked very, very hard to get to where I am and have received critical support from mentors, both men and women, along the way.

I think in any non-traditional field it can be particularly challenging for women, especially in pursuing their highest career ambitions. It is indisputable that at a certain level, either through cultural or structural barriers, opportunities shrink drastically for women and they are often judged more harshly if they do excel.

In my experience, security is generally comprised of mostly male, former military and law enforcement personnel, who exhibit and broadly value similar leadership attributes stemming from that background. I think the industry will benefit immensely from increased diversity"

- *Liz Maloney, Global Security, Global Intelligence Program Manager*

Welcoming a more diverse workforce into cybersecurity

It starts with commitment

Increasing diversity requires focus and attention. If you sit back and passively wait for the right resumes to land in your inbox, nothing will change. Much of this starts with the executive team making a concerted effort to take a stand and ask themselves and their organization why they don't have more women on their teams. Openly discuss with your teams the cultural aspects that make it hard for diversity to thrive. With the right commitment, you can put structures in place to find the people that you want.

Start Young

It starts with commitment

One way to do this is with training programs for kids.

As more security conferences look to create “hackathons” for middle and high school students, as well as scholarship programs for college students, they must deliberately foster diversity.



Provide a platform for your cybersecurity women

Many young women are looking for role models. They want to feel connected with their coworkers. Send women from your organization to recruiting events on college campus so prospective candidates can get to know your team. Elevate the female leaders at your company with articles or speaking roles at conferences.

As people see more women and other underrepresented groups in cybersecurity, stereotypes will be tested. This will encourage a diverse group of people to apply. We need them! Diversity will make us better at solving the complex problems inherent in cybersecurity.



"The nation's community colleges serve the majority of underrepresented students and provide them access to the higher education and skills needed for today's highly technical careers. This program allows us to work directly with Microsoft to provide timely, relevant, and cost-effective skills training that allows today's students to become tomorrow's employees."

— Dr. Walter Bumphus, President and CEO, American Association of Community Colleges



Faculty professional development and support for earning Center of Academic Excellence in Cyber Defense Designation

Microsoft has partnered with the National Cybersecurity Training & Education Center (NCyTE) to provide resources, mentorship, and partnership in support of cybersecurity program development. This includes faculty professional development and support in attaining the Center of Academic Excellence in Cyber Defense (CAE-CD) Designation. Learn more and explore professional development opportunities at ncyte.net/acce.



Community of practice to support expanding cybersecurity programs

Microsoft has partnered with the American Association of Community Colleges to launch a community of practice for institutions offering cybersecurity education. Grants will provide funding and technical assistance to selected community colleges who are accelerating their cybersecurity programs. Requests for proposals due December 2, 2021. Learn more and submit at aka.ms/CyberSkillsForAll.



Scholarships for low-income students pursuing cybersecurity career pathways

To address the diversity and talent shortages in the cyber workforce, we partnered with the Last Mile Education Fund to launch the Microsoft Cybersecurity Scholarship Program. We are committed to supporting 10,000 low-income students - including Veterans - pursuing cybersecurity career pathways and certifications at 2-year institutions. Students will also receive free LinkedIn Premium accounts to help close the networking gap and connect them to jobs as well as access to GitHub Education benefits, including the Student Developer Pack and access to local GitHub sponsored events. Applications are open on a rolling basis. Students can apply at lastmile-ed.org/MicrosoftCybersecurityScholarship.



Ready-to-teach curriculum and teaching materials aligned to industry needs

Microsoft Learn for Educators provides faculty with access to Official Microsoft Learning Products for Microsoft Azure, Azure data, Azure AI, Power Platform and Security, Compliance and Identity (SCI). As a part of the program, faculty receive training and tools to prepare them to deliver cutting-edge technical instruction to their students. Each curriculum covers Microsoft Certification exam objectives through lessons based on real-world scenarios and practice exercises. Faculty members are provided access to free teaching materials, training, and tools for delivering Microsoft-based technical courses at aka.ms/MSLE.

Learn more

Help a Sister Up on LinkedIn, #hasu. This space is dedicated to advancing women in technology and serves as a rallying point for them and their male advocates. We post job openings, articles, and avenues for discussion. Please join Help a Sister Up.

- Read Ann Johnson's post in this series: Welcoming more women into cybersecurity: the power of mentorships.

- Read Diana Kelley's post in this series: Welcoming a more diverse workforce into cybersecurity: the role of corporate culture.

- Bookmark the Security blog to keep up with our expert coverage on security matters. Also, follow us at @MSFTSecurity for the latest news and updates on cybersecurity.

Thank you!

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