Optimizing Your Cyber Career Opportunities

CYBER PATHWAYS

Exploring access to high quality career pathways aligned to the needs of employers

Cyber Apprenticeships

Youth Initiatives

WHEN YOU HEAR "CYBER PROFESSIONAL" WHAT DO YOU IMMEDIATELY THINK OF?

There is an unprecedented demand for cybersecurity professionals across all industries. Frequent threats to digital infrastructure highlight a critical need for proactive strategies to protect that infrastructure.

Hacker / Attacker / Black Hat / Red Team

Defender / Response / White Hat / Blue Team

WHAT ARE YOU MOST INTERESTED IN?

WHAT'S IN CYBER HIGH DEMAND?

Protecting Digital Infrastructure

Application development security and **cloud security** are projected to be the fastest-growing skill areas in cybersecurity and are integral components of a job related to building a secure digital infrastructure. The most common occupations that integrate these skills include *Software Developer, Cybersecurity Engineer, Systems Engineers, and Cloud Architect*

Reference

APPLICATION SECURITY

CLOUD SECURITY

RISK MANAGEMENT

THREAT INTELLIGENCE

PATHWAYS TO CYBER SUCCESS

SIGNIFICANT RETURNS ON INVESTMENT FOR APPRENTICESHIP PROGRAM EMPLOYERS

Highly skilled, highly productive, highly retainable

BLENDED APPROACH

Traditional Pathways

Employer or self-sponsored education, certificates, certifications, OJT, and re-training / retainment scenarios

Apprenticeship Pathways

Partner networks across academia, technology firms, training entities, non-profits, and commercial or government empoyers

WHO'S WHO IN THE APPRENTICESHIP ECOSYSTEM?

Apprenticeship.gov

Apprenticeship is your proven solution for recruiting, training, and retaining world-class cybersecurity talent.

A competitive edge in having a pool of passionate people on a path to improvement and success

NICE Cybersecurity Apprenticeship Program Finder

Reference 1, Reference 2

Cybersecurity Demand Signals

Five-Year Projected Growth in Cybersecurity Skill Areas[2]

Skill Area	Growth
Application Development Security	164%
Cloud Security	115%
Risk Management	60%
Threat Intelligence	41%
Incident Response	37%
Data Privacy and Security	36%
Compliance and Controls	36%
Access Management	32%
Health Information Security	20%
Security Strategy and Governance	20%
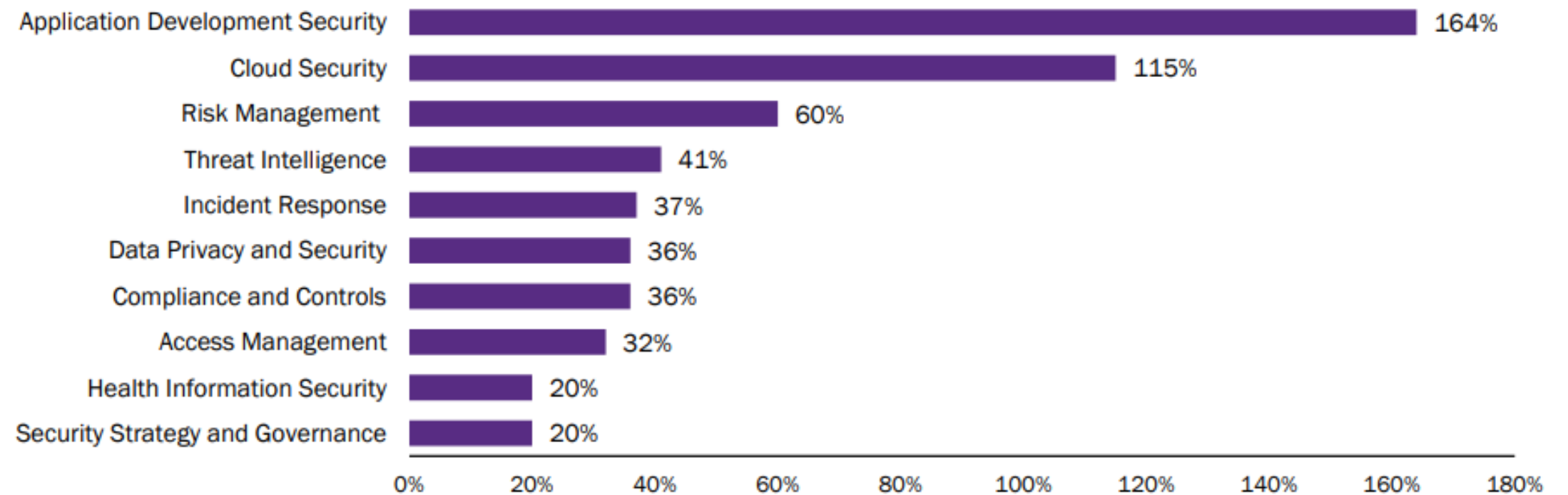
Risk management and **threat intelligence** skills are also critical to securing digital infrastructure, and are projected to grow by 60% and 41% over the next five years respectively. These skills are important for roles such as *Cybersecurity Analyst, Security Intelligence Analyst,* and *Vulnerability Analyst*. These occupations often do not require advanced college degrees or extensive experience, which makes registered apprenticeships a great solution to train workers in these skills.

Reference

Role Models

These gains are important not only for current women cybersecurity professionals but also for future generations. The more women who succeed in cybersecurity, the more likely they are to attract other women into the field

Leaders by Nature

Compared to men, higher percentages of women cybersecurity professionals are reaching positions such as chief technology officer (7% of women vs. 2% of men), vice president of IT (9% vs. 5%), IT director (18% vs. 14%) and C-level/ executive (28% vs.19%), based on findings in the 2018 (ISC)2 Cybersecurity Workforce Study. The figures show that women are forging a path to management

Advancement of Women Within Cybersecurity

All of a sudden Cyber took on a whole new range…

"All of a sudden, cyber took on a whole new range. Now it's how you educate your children. It's how you ensure that you have proper health care," said the Defense Department's Undersecretary of Defense for Acquisition CISO Katie Arrington. "We're working from home on computers, and we need that capability to think in the holistic picture of what cyber means."

✓ What We Learned from COVID-19

The value of soft skills necessary for a successful career in the field, particularly in cyber leadership roles. These include problem-solving, critical thinking and negotiation skills, as well as the ability to build and maintain relationships.

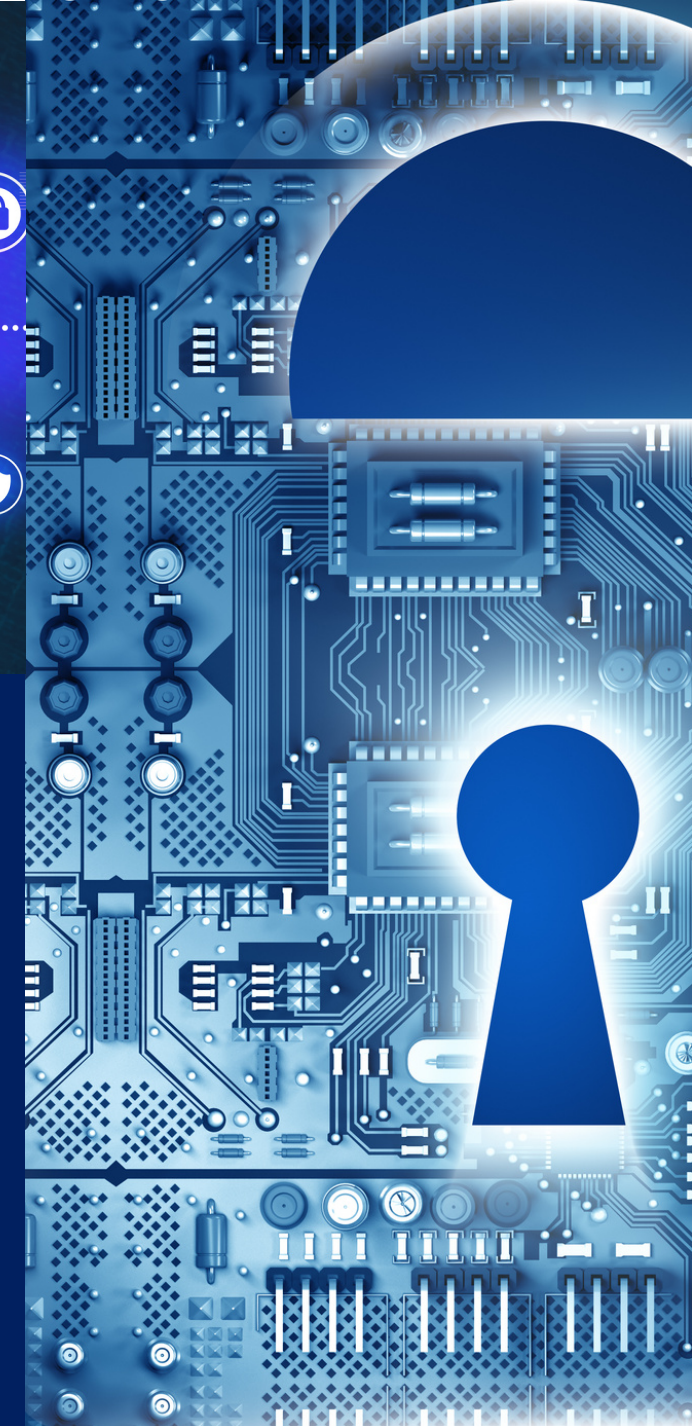# What Action Can You Can Take Today Towards Achieving Your Cyber Career Goal Today?

"You are [the] essential ingredient in our ongoing effort to reduce Security Risk

-- *Kirsten Manthorne*

Which Pathway is for YOU?

Opportunity is knocking, which door will you open?

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THANK YOU

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Dr. Rhonda Farrell, Founder, CSTGIA

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