



A Career in Cybersecurity Without Coding?

Yes, you can!

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Cathy Olieslaeger

MBA, CISSP, CISM, CCP
Zero Coding Experience

Rewriting the People Story in Cybersecurity

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LLC
Podcast Host, Journey into Cybersecurity

Why the Bad Guys Still Win

1

Rapid Tech Changes

Technology evolves at hypersonic speeds; AI being the latest shiny toy.

2

Quick Adoption by Hackers

Malicious actors immediately adopt new technologies for hacking.

3

Slow Corporate Response

Organizations lag in adopting defensive solutions due to budget cycles.

4

Cultural Disconnect

Corporate culture fails to prioritize cybersecurity as a business risk.





Challenge the People Story

- 1 Boys Club
Cybersecurity remains predominantly male-dominated.
- 2 "Talent Gap"
The cyber talent gap is actually a process gap.
- 3 CISO's Dilemma
CISOs are stuck between a rock and a hard place, lost in translation.

To break into
cybersecurity,

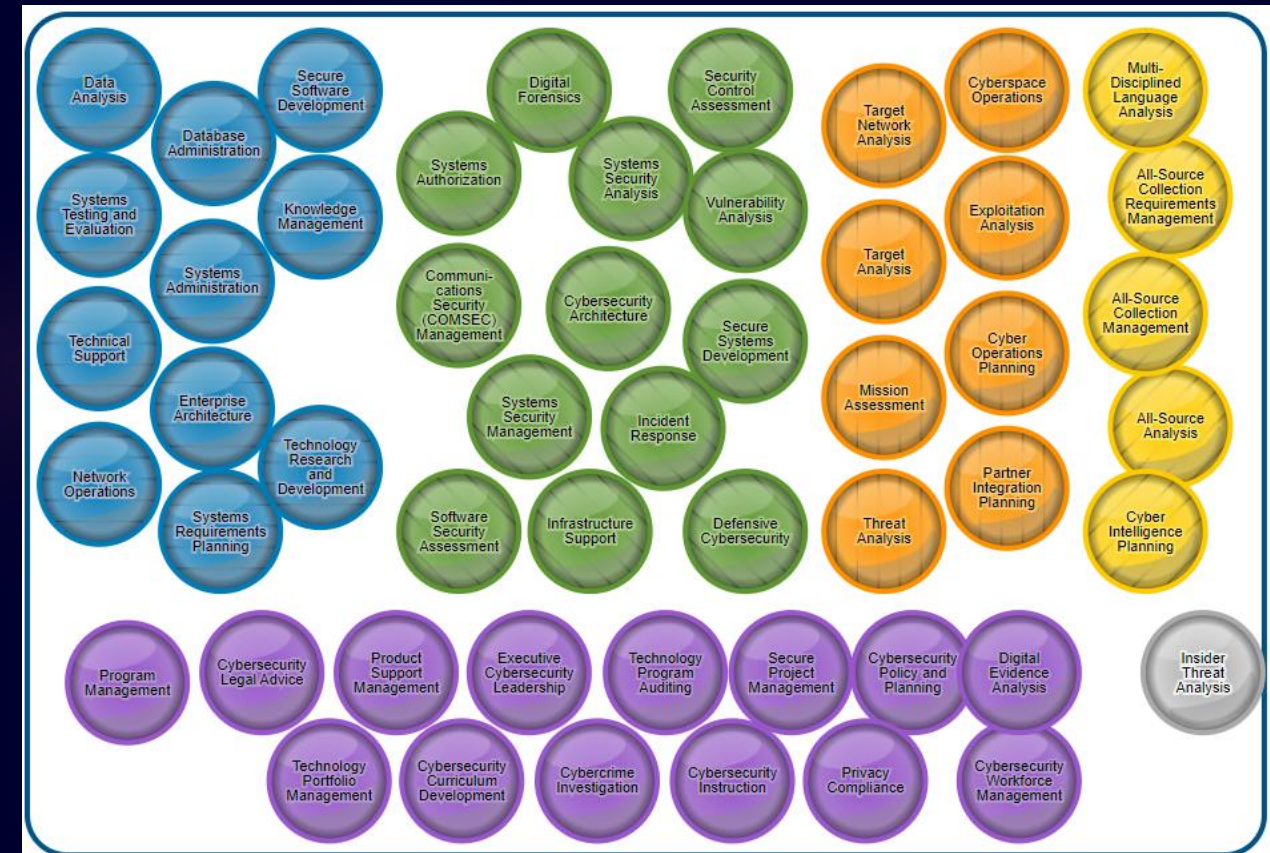
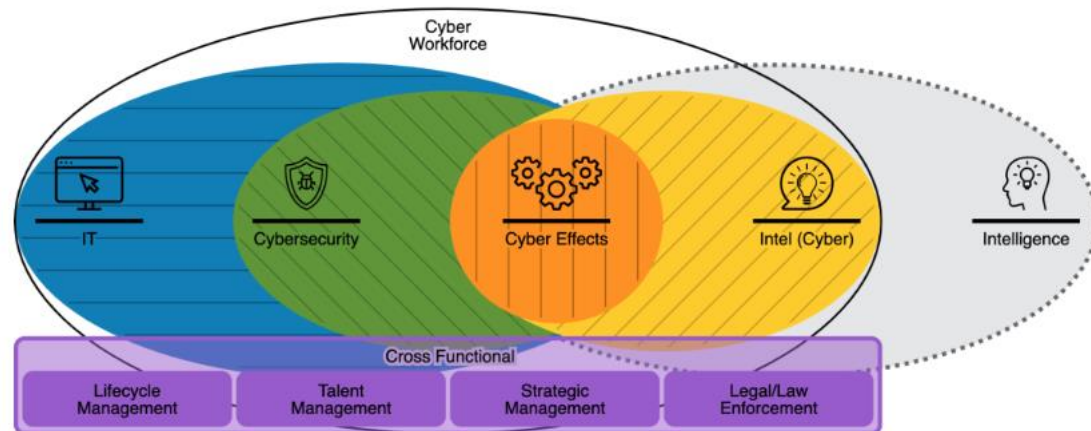
hack the system!



Cybersecurity Career Pathways

About the Cyber Workforce Communities Venn Diagram

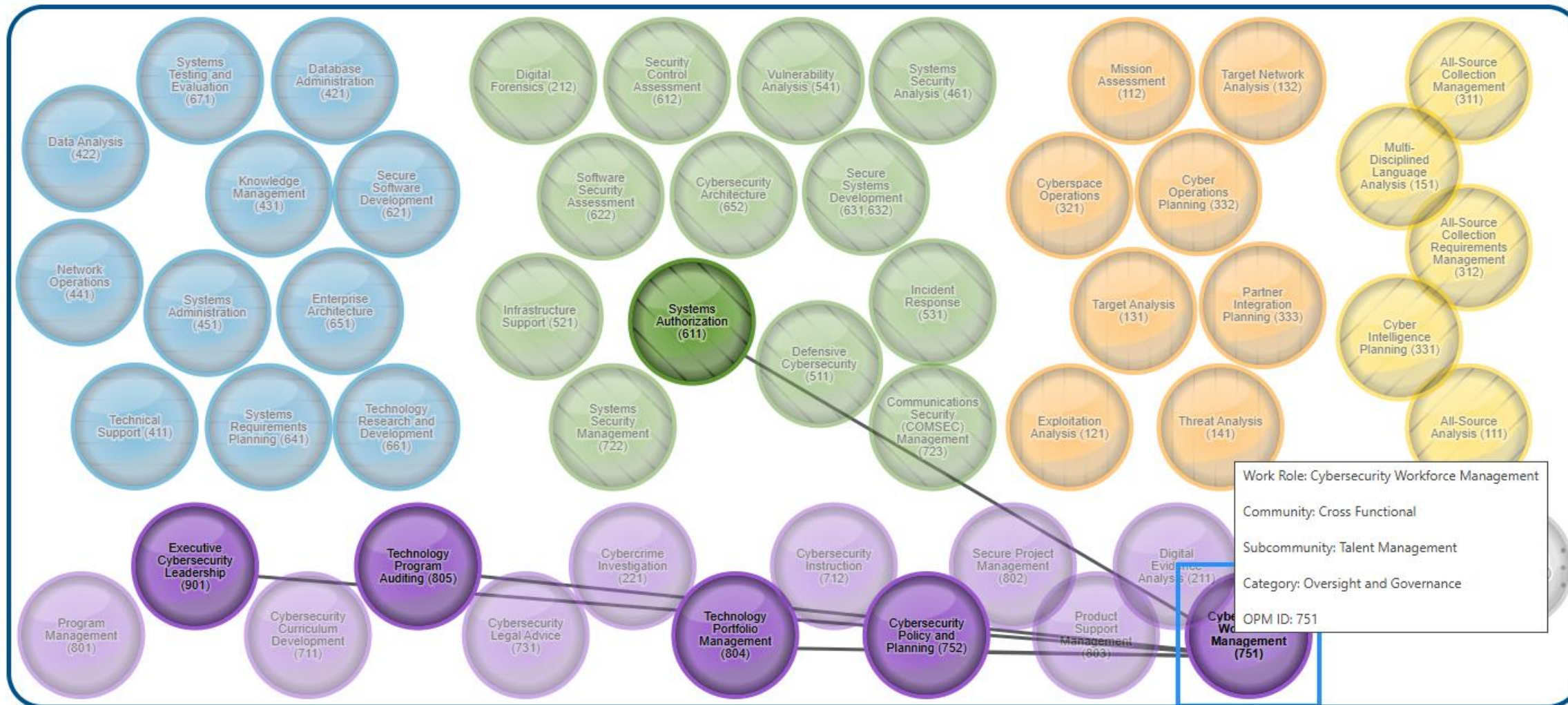
The Cyber Workforce encompasses the skills required to **build, secure, operate, defend** and **protect** technology, data, and resources; **conduct** related **intelligence** activities; enable **future operations**; and **project power** in or through cyberspace. It is comprised of the following skill communities: **IT, Cybersecurity, Cyber Effects, Intel (Cyber), and Cross Functional**. The skill communities are color coded to match the work role galaxy.



NICCS Career Pathways Tool

Explore diverse cybersecurity career options using the NICCS tool

<https://niccs.cisa.gov/workforce-development/cyber-career-pathways-tool>



Federal Cybersecurity Pathways

DOD Cyber Exchange


Explore diverse cybersecurity career options:

- Cybersecurity
- Cyber IT
- Cyber Enablers

<https://public.cyber.mil/wid/pathways/>

CAREER PATHWAY EXECUTIVE CYBER LEADERSHIP (901)	1
1 901-EXECUTIVE CYBER LEADERSHIP	3
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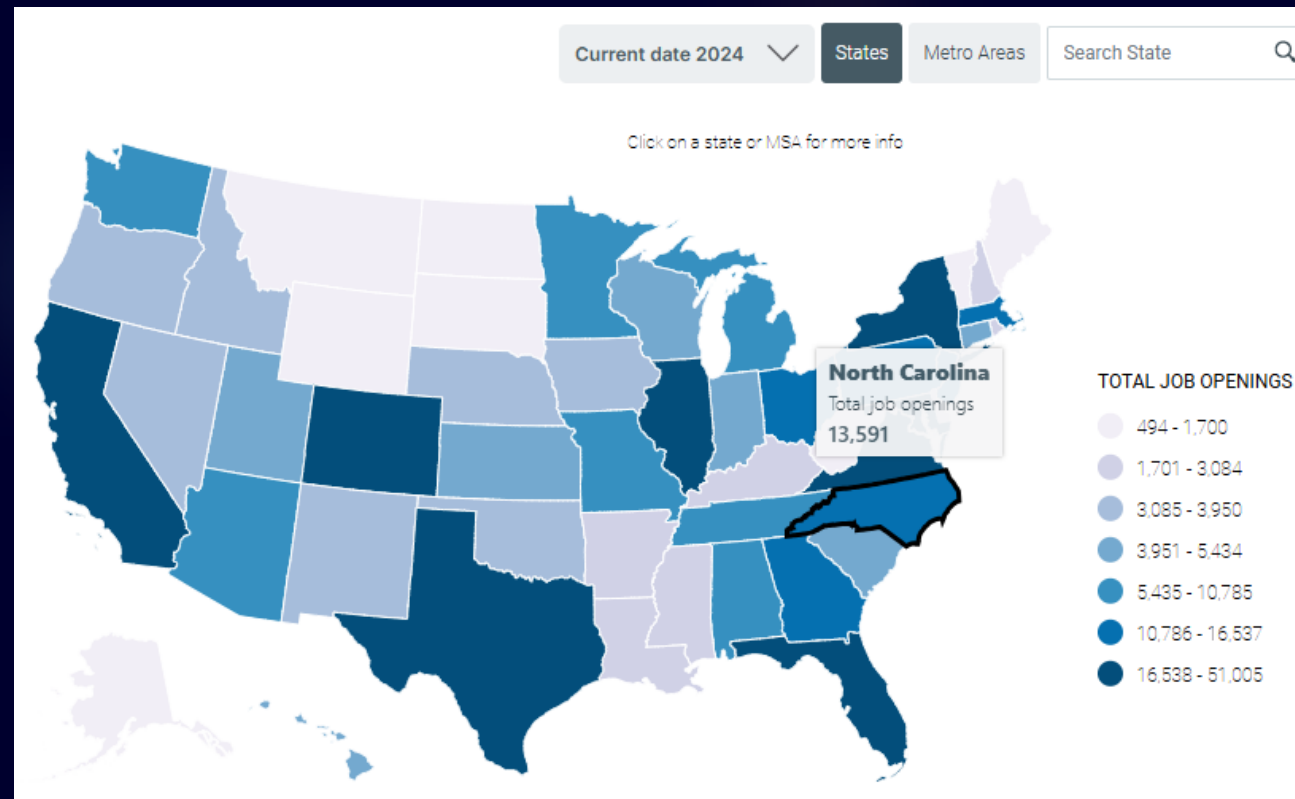




Cyber Enablers

- [211 Law Enforcement Counterintelligence Forensics Analyst](#)
- [221 Cyber Crime Investigator](#)
- [711 Cyber Instructional Curriculum Developer](#)
- [712 Cyber Instructor](#)
- [731 Cyber Legal Advisor](#)
- [732 Privacy Officer Privacy Compliance Officer](#)
- [751 Cyber Workforce Developer and Manager](#)
- [752 Cyber Policy Strategy Planner](#)
- [801 Program Manager](#)
- [802 IT Project Manager](#)
- [803 Product Support Manager](#)
- [804 IT Investment Portfolio Manager](#)
- [805 IT Program Auditor](#)
- [901 Executive Cyber Leadership](#)

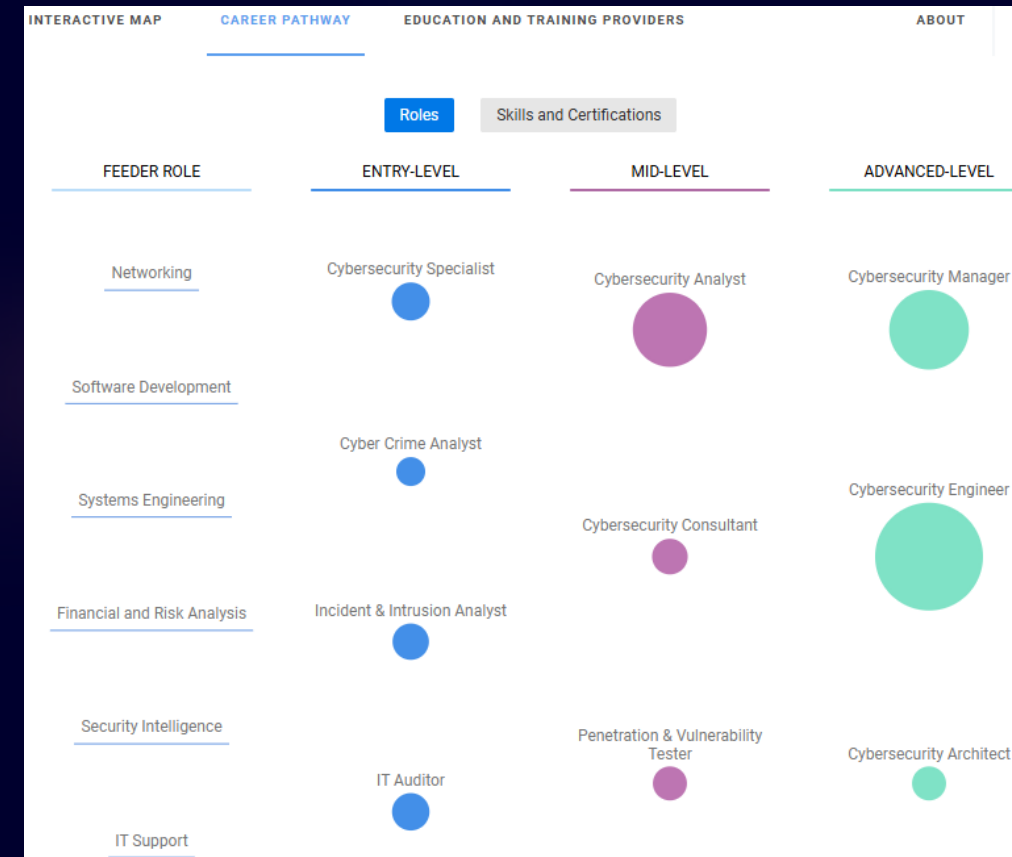
Cybersecurity Opportunities Galore



CyberSeek Interactive Map

North Carolina: 13,591 open jobs on 10/28/2024

<https://www.cyberseek.org/heatmap.html>



CyberSeek Career Pathway

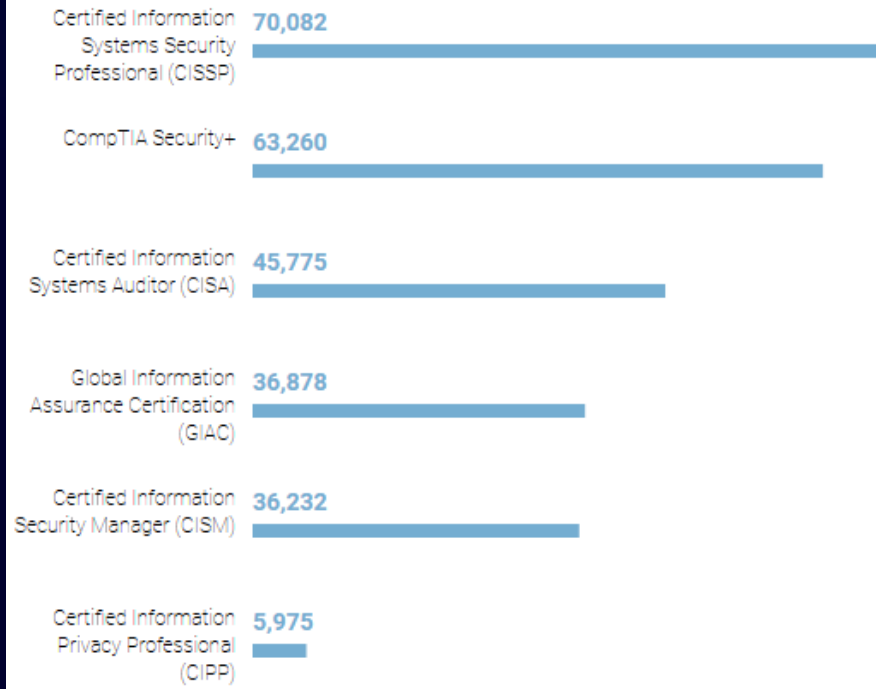
Cybersecurity Pathways

<https://www.cyberseek.org/pathway.html>

CERTIFICATION HOLDERS / OPENINGS REQUESTING CERTIFICATION ⓘ

■ Certification holders

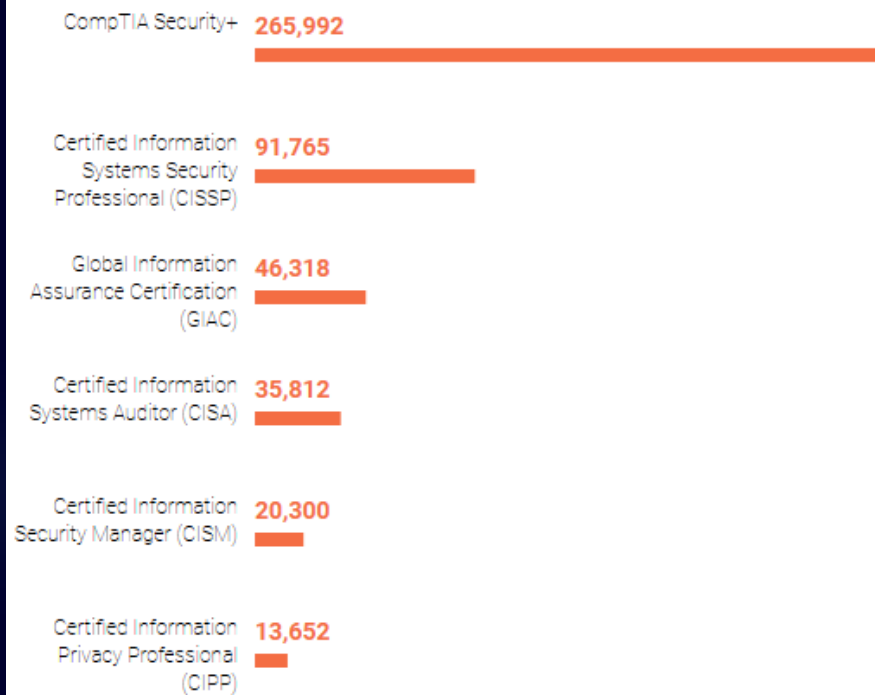
■ Openings requesting certification



CERTIFICATION HOLDERS / OPENINGS REQUESTING CERTIFICATION ⓘ

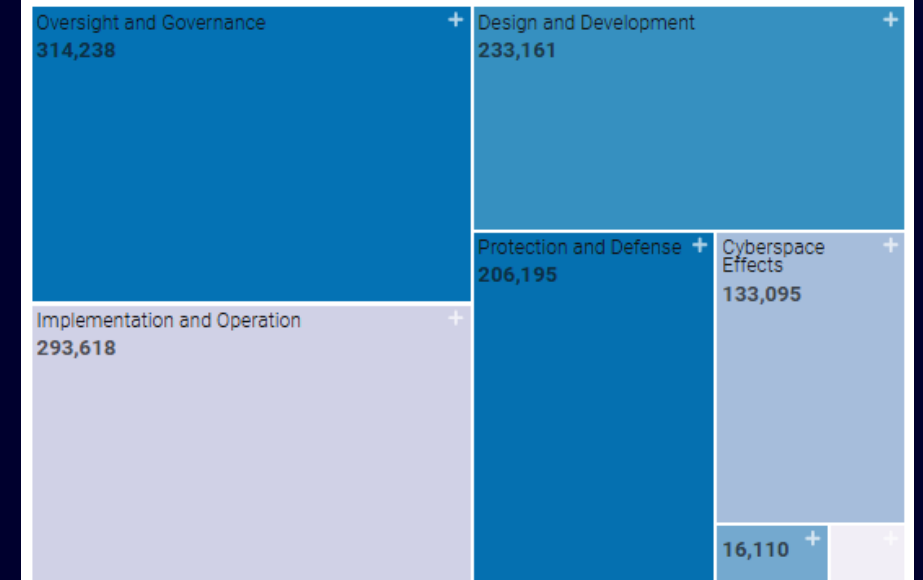
■ Certification holders

■ Openings requesting certification

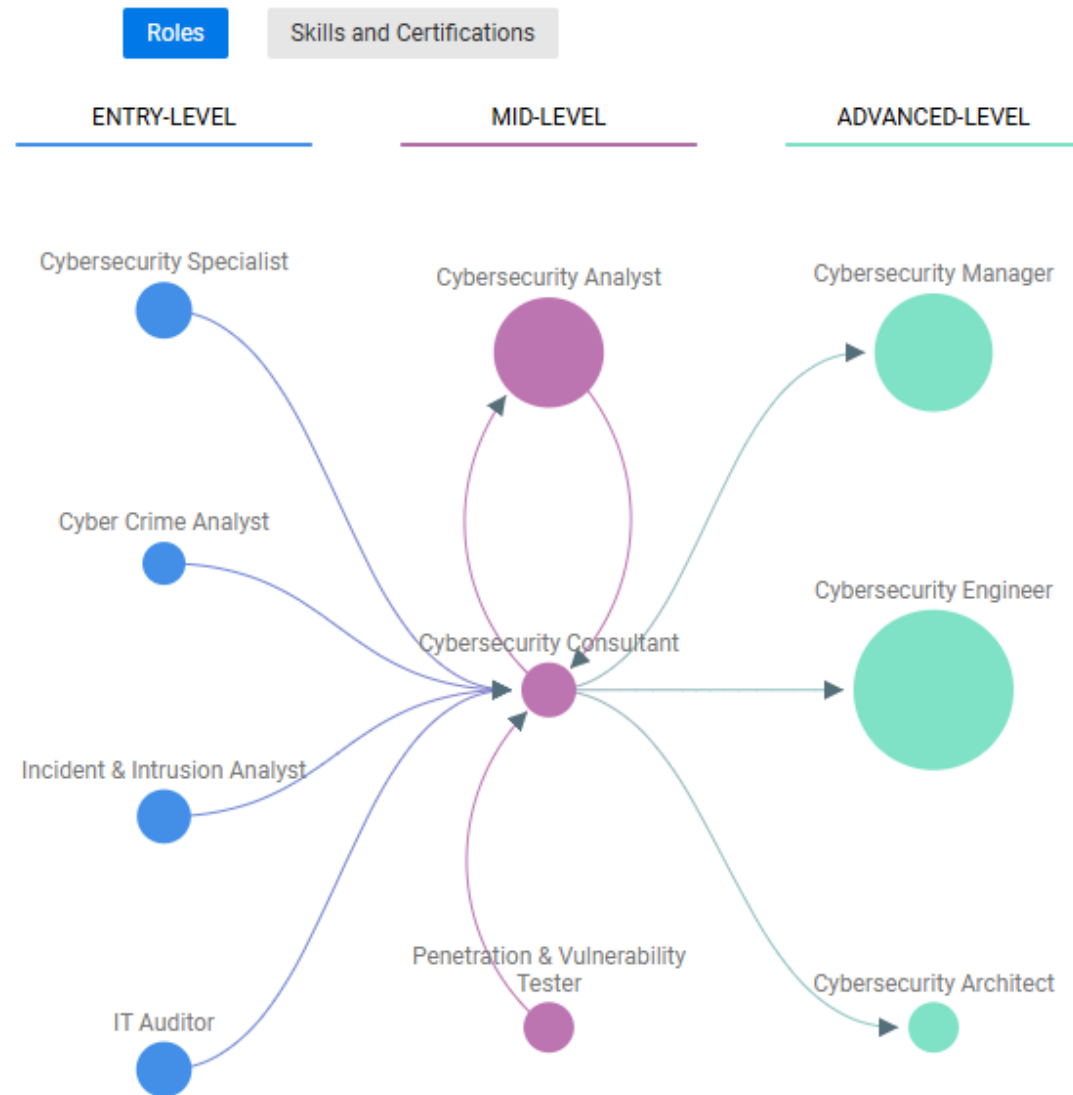


JOB OPENINGS BY NICE CYBERSECURITY WORKFORCE FRAMEWORK CATEGORY ⓘ

NICE



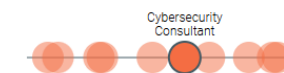
Notes: The NICE Workforce Categories are not mutually exclusive- one job could perform multiple roles within the framework. The data shown here are not intended to be aggregated.



Cybersecurity Consultant

AVERAGE SALARY ⓘ

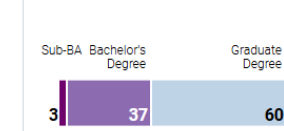
\$125,243



COMMON JOB TITLES ⓘ

- Cybersecurity Consultants
- Security Consultants
- Cyberark Consultants
- Information Security Consultants
- Consultants

REQUESTED EDUCATION (%) ⓘ



TOTAL JOB OPENINGS ⓘ

5,177



TOP FUTURE SKILLS REQUESTED ⓘ

Skills	5-Year Projected Growth
Security Foundation & Threat Intelligence	164%
Cloud Security	136%
Preventative Antivirus	74%
Cloud Access Security Broker (CASB) Management	69%
Enterprise Mission Assurance Support Service	65%

COMMON NICE CYBERSECURITY WORKFORCE FRAMEWORK CATEGORIES ⓘ

- Design and Development
- Protection and Defense
- Oversight and Governance
- Cyberspace Effects

TOP CERTIFICATIONS REQUESTED ⓘ

- Certified Information Systems Security Professional
- Certified Information System Auditor (CISA)
- Certified Information Security Manager
- Certified Ethical Hacker
- GIAC Certifications

TOP SKILLS REQUESTED ⓘ

- 1 Cyber Security
- 2 Computer Science
- 3 Identity And Access Management
- 4 Vulnerability
- 5 Authentications
- 6 Microsoft Azure
- 7 Project Management
- 8 Cloud Security
- 9 Incident Response

Experience is Gold

Internships are the Best Hack to Break into Cybersecurity

Gain experience through internships to break into the cybersecurity field.

<https://www.thetrianglenet.com/mentorships-internships-jobs/>

Look for summer internships NOW.

Once you made it in the professional world, create internships.
Pay your good fortune forward.





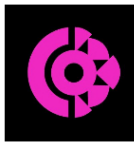
Cloud Cybersecurity Intern

Tanium
Durham, NC (On-site)
\$55/hr



Security Governance, Risk, and Compliance Intern (Remote)

Trace3
United States (Remote)
\$18/hr - \$25/hr · 401(k) benefit



Governance Risk and Compliance Intern

Claroty
United States (Remote)
\$23/hr - \$25/hr



Communications Specialist (Intern United States)

Cisco
Raleigh, NC (On-site)
\$44K/yr - \$130K/yr



IAM Intern

Labcorp
Durham, NC
401(k) benefit

INTERNSHIPS

Apprenticeships - US Dept. of Labor

Search open apprenticeship job opportunities from employers across the country and directly apply with the employer of the apprenticeship program. Can't find an open apprenticeship job to match your preferred location or occupation? Try connecting with an apprenticeship program to learn more about when they are accepting new apprentice applications by searching on the "Apprenticeship Programs" tab.

Find the right internship for you at internships.com.

[Cybersecurity Internships in the US on Indeed](#)

Cisco internships

Cisco interns and new-grads gain relevant experience to inspire innovation and grow their careers.

CompTIA Apprenticeships for Tech

Highly skilled tech talent is needed to accelerate growth in every industry. It's critical that the tech talent pool better reflects the growing diversity of today's workforce. CompTIA Apprenticeships for Tech allow businesses to diversify their tech teams, which benefits both employers and employees alike. Registered apprenticeships for tech also offer businesses the opportunity to upskill and reskill workers, while connecting people to promising careers in IT.

[CyberUp - LevelUp Apprenticeships](#)



Game Security Intern

Epic Games
Cary, NC (On-site)



Network Operations Support Summer 2025 Internship

Verizon
Cary, NC (Hybrid)
\$23/hr - \$31/hr · 401(k) benefit



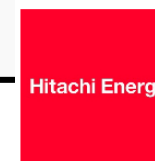
Compliance Risk Management Intern

First Citizens Bank
Raleigh, NC (On-site)



Intern – IT, Security Analyst, Cyber Fusion Center

Gilead Sciences
Raleigh, NC
\$19/hr - \$55/hr



2025 Summer Computer Science/Software/Cyber Security Intern

Hitachi Energy
Raleigh, NC (On-site)

GRC: No Coding Required

Trying to explain our current
cyber risk to the board



GRC: No Coding Required, Endless Opportunities

NIST CSF 2.0

Emphasizes governance and top-down cyber risk management.

CMMC

Requires compliance for organizations in the Defense Industrial Base.

DORA

New EU regulation affecting US financial organizations by January 2025.

The Common Denominator = Supply Chain Risk Management

Other areas to gain an edge: Ethics, AI risk, Privacy and Education

<https://www.thetrianglenet.com/grc/>

The NIST Cybersecurity Framework (CSF) 2.0

1

Governance

Executive leaders must set a cybersecurity risk management strategy , manage cyber risk proactively. Cybersecurity risk is business risk.

2

Resilience in the Supply Chain

Third-party risk must be managed.

3

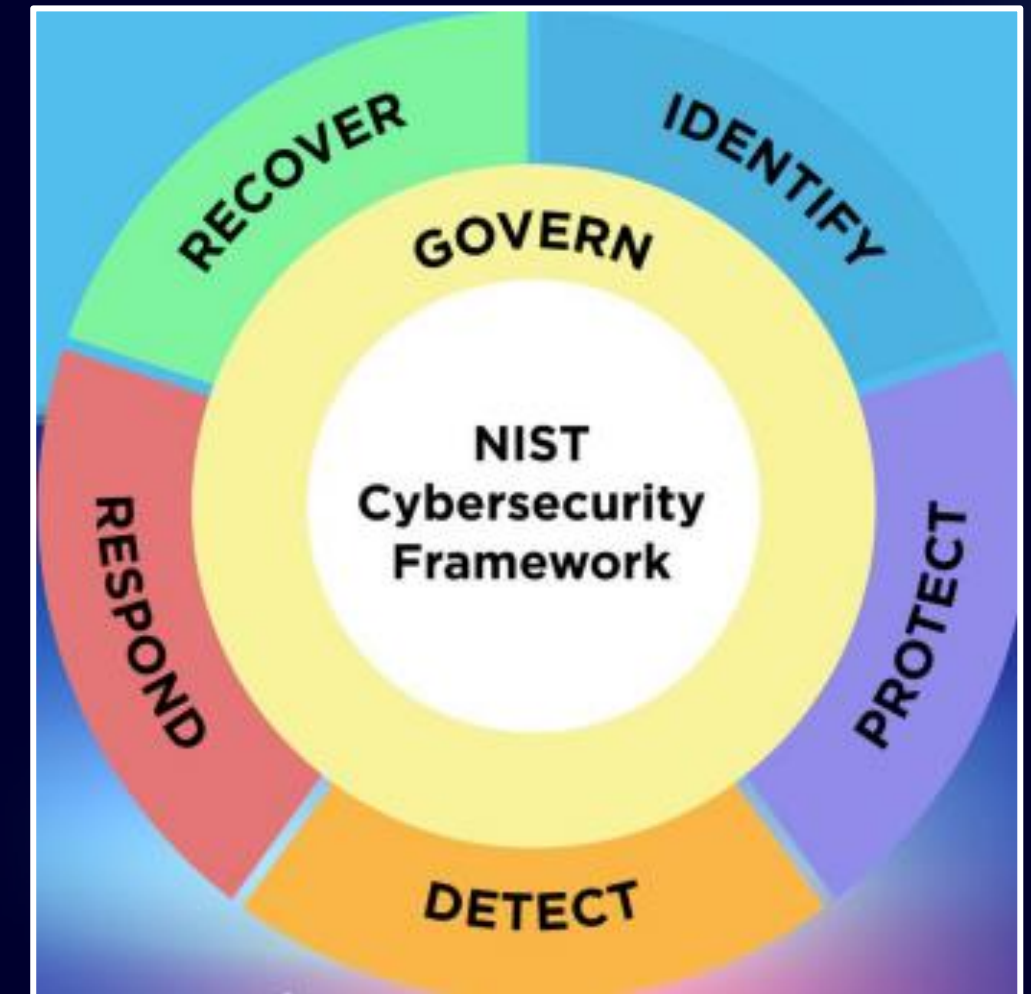
Incident Readiness

Incident reporting requirements across industry and regulations are more demanding.

4

Outcome Based

NIST provides resources and implementation guides based on the type of organization and the regulatory environment they operate in.



Cybersecurity Maturity Model Certification (CMMC)

- 1

Defense Industrial Base

National security depends on strong cybersecurity within the DIB.
- 2

FCI or CUI determine CMMC Level

NIST SP 800-171 for Levels 1, 2 + NIST SP 800-172 for Level 3.
- 3

Certification equals Big Business with the DoD & Primes

If certified by a C3PAO, contractor can be awarded contract.
- 4

Code of Professional Conduct

The biggest threat comes from within.

CMMC Model	CMMC Model	
	Model	Assessment
	LEVEL 3	<div>134 requirements (110 from NIST SP 800-171 r2 plus 24 from 800-172)</div> <div><ul style="list-style-type: none">DIBCAC assessment every 3 yearsAnnual Affirmation</div>
	LEVEL 2	<div>110 requirements aligned with NIST SP 800-171 r2</div> <div><ul style="list-style-type: none">C3PAO assessment every 3 years, orSelf-assessment every 3 years for select programs.Annual Affirmation</div>
LEVEL 1	<div>15 requirements aligned with FAR 52.204-21</div> <div><ul style="list-style-type: none">Annual self-assessmentAnnual Affirmation</div>	

C3PAO = CMMC Third-Party Assessment Organization

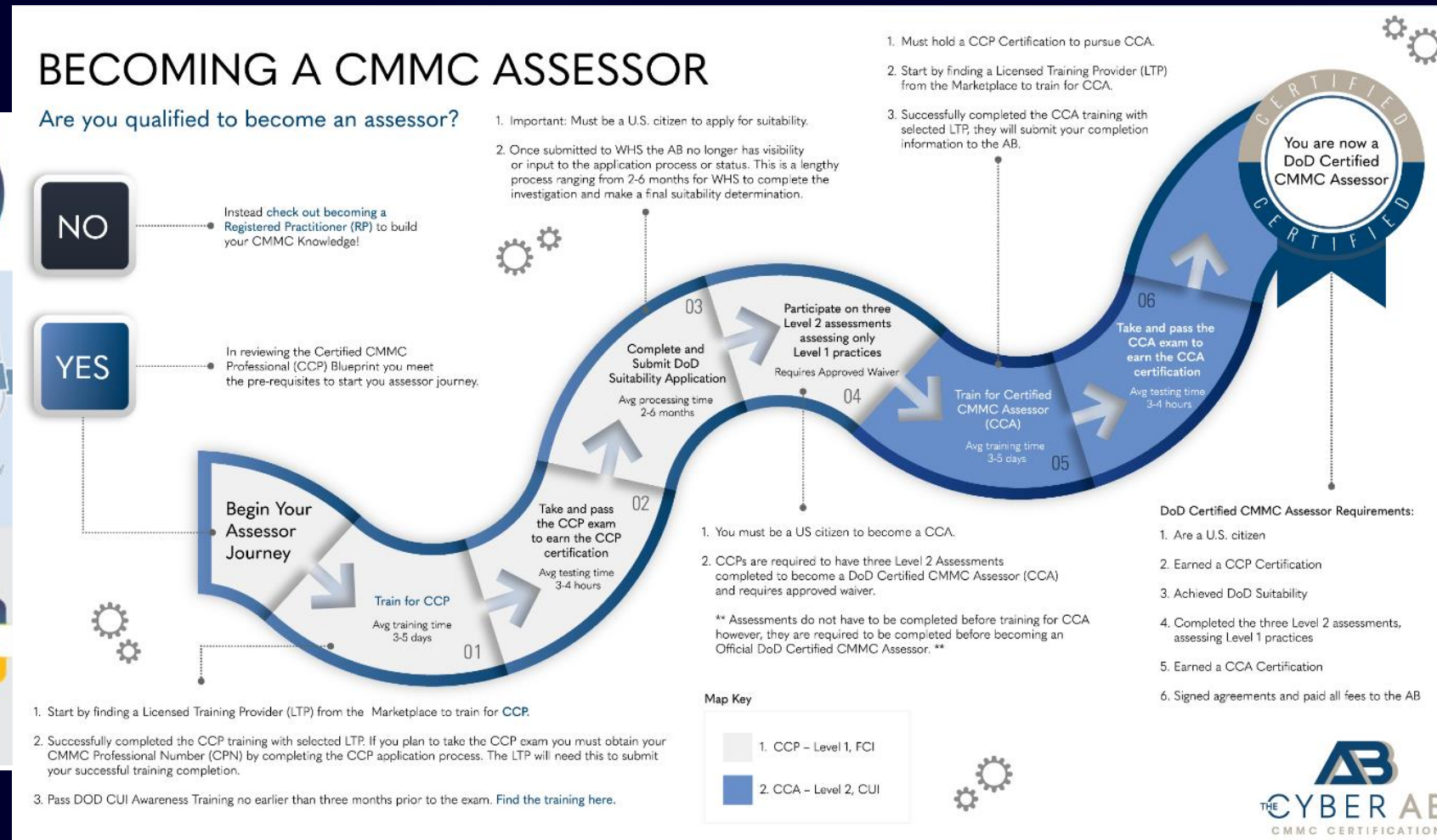
The CMMC Ecosystem



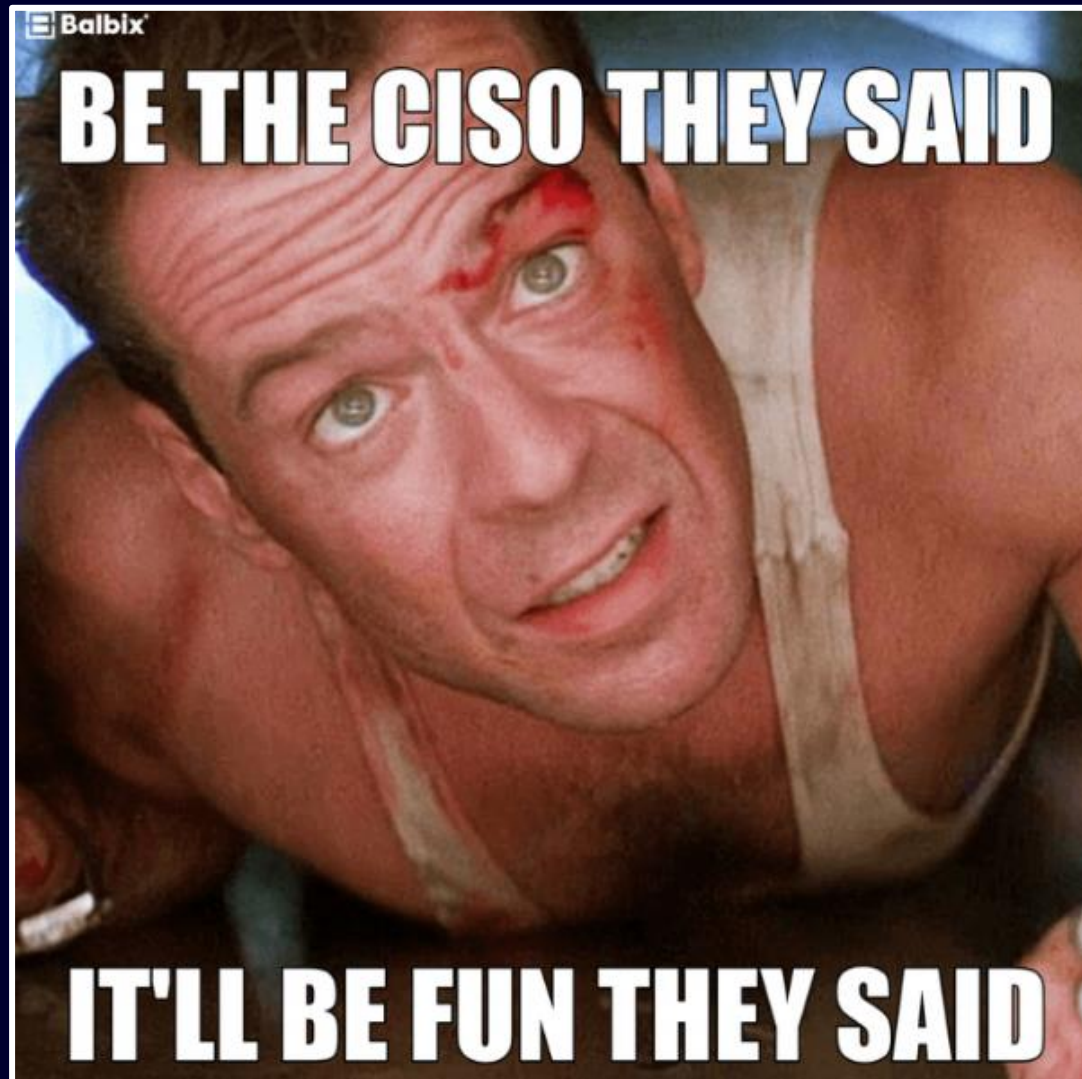
Registered Practitioners (RP) can consult.
 Certified CMMC Professionals (CCP) can consult/assess.
 Certified CMMC Assessors (CCA) can lead assessments.
 Certified CMMC Instructors (CCI) can assess/teach.

<https://cyberab.org/CMMC-Ecosystem/Ecosystem-Roles>

<https://cyberab.org/Catalog#!/c/s/Results/Format/list/Page/1/Size/9/Sort/NameAscending>



CISO 2.0: The Evolving Role



1

Cybersecurity Risk is Business Risk

Treat cybersecurity risk as business risk.

Align cybersecurity program and risk management practice with corporate strategy.

2

Risk Quantification

Translate technical concepts into lehman terms for executives.

Quantify risk in dollars.

Prioritize risk mitigation based on the financial impact.

3

Supply Chain Risk Management

Prioritize third-party risk management in cybersecurity practices.

Across people, processes and systems implement data-centric security policies.

Kelsey's Cybersecurity Journey



1

Early Interest

Started by breaking into her parent's tablet.
Became a drone instructor.

2

Education

Pursued a Bachelor's in cybersecurity.
Attended ISSA conferences.

3

Professional Growth

Joined the BestBuy Geek Squad.
Secured a federal security internship.
... before her senior year in college!



The Future of Cybersecurity Careers

Diverse Opportunities

Numerous paths available in cybersecurity, catering to various skills and interests.

Continuous Learning

Stay updated with evolving regulations and technologies in the field.

Industry Growth

Increasing demand for cybersecurity professionals across all sectors.

My next chapter...

Pocket Guide Q1 2025:

Cybersecurity for Everyone:

A Human-Centered Approach to Protecting Yourself and Your Community.

Cybersecurity Advisory

- Contractor to Registered Practitioner Organizations (RPO) and CMMC Third-Party Risk Assessor Organizations (C3PAO) for CMMC consulting or assessment services
- On-demand cybersecurity and risk management advisory
- Introductory risk management presentation for leaders in the C-suite or Boards of Directors.

Staff Augmentation

Connecting people with opportunities in cybersecurity in collaboration with Garnet River.

Journey into Cybersecurity Podcast

Season 3 = TBD

**NEVER SAY YOU CAN'T
DO SOMETHING. SAY, I
HAVEN'T DONE IT YET.**

– Rick Rubin

You matter!



Resources

GRC

Simply Cyber, How to break into GRC (Gerald Auger)

<https://academy.simplycyber.io/p/the-definitive-grc-analyst-program>

GRC Academy: <https://grcacademy.io/>

NIST CSF: <https://www.nist.gov/cyberframework>

DOD CMMC: <https://dodcio.defense.gov/CMMC/>

Work Opportunities

<https://www.thetrianglenet.com/mentorships-internships-jobs/>

Career Paths

DOD: <https://public.cyber.mil/wid/pathways/>

NICCS: <https://niccs.cisa.gov/workforce-development/cyber-career-pathways-tool>

Cyberseek: <https://www.cyberseek.org/pathway.html>

TCM, How to be an ethical hacker in 2025

<https://tcm-sec.com/how-to-be-an-ethical-hacker-in-2025/>

Bias – With it, we lose

TED, Why are women still taken less seriously than men, Oct 2023

https://www.ted.com/talks/mary_ann_sieghart_why_are_women_still_taken_less_seriously_than_men

The Sisterhood, The Secret History of Women at the CIA, Liza Mundy: <https://www.lizamundy.com/the-sisterhood/>

Cyversity: <https://www.cyversity.org/>

