Cybersecurity Career Academy

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- My Cybersecurity Career Path
- What is Cybersecurity?
- Business is Booming!
- What are the Different Roles?
- So you want to be a Cyber Pro?
- What are some resources to learn from?
- Ok, I have learned some things, how do I prove it?
- The Big Reveal!

Disclaimer – Slides contain my thoughts and opinions based on my career experiences ©

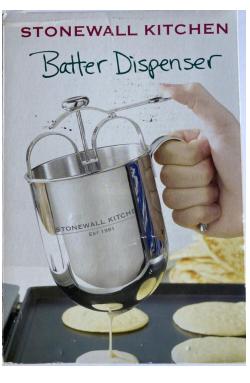






My Cybersecurity Career Path

- BS Marketing and International Business UMaine
- Marketing Intern Stonewall Kitchen
- Market Management Liberty Mutual
- MBA SNHU
- ----- Re-Org ------
- Cybersecurity Career Begins
- MS Information Assurance Norwich University
- Vuln Management -> Log Management -> Incident Response ->
 SysAdmin -> Cybersecurity Engineer -> Building a SOC -> Director of
 Cybersecurity Engineering -> Director of Cloud Security Engineering ->
 CISO USNH.









What is Cybersecurity?

"Cybersecurity is the art of protecting networks, devices, and data from unauthorized access or criminal use and the practice of ensuring confidentiality, integrity, and availability of information." - CISA

Security Hacker:

https://en.wikipedia.org/wiki/Security hacker
https://en.wikipedia.org/wiki/List of security hacking incidents

Computer Security:

https://en.wikipedia.org/wiki/Computer security

Books:

Cult of the Dead Cow

Ghost In The Wires

The Cuckoos's Egg

Tracers in the Dark - New!

The Fifth Domain

Counter Hack Reloaded









"Cybersecurity workers protect our most important and private information, from bank accounts to sensitive military communications."



TOTAL CYBERSECURITY JOB OPENINGS

464,420

TOTAL EMPLOYED CYBERSECURITY WORKFORCE

956,341



TOTAL CYBERSECURITY JOB OPENINGS

0

1,075

TOTAL EMPLOYED CYBERSECURITY
WORKFORCE

2,999

Cyberseek Project supported by The National Initiative for Cybersecurity Education (NICE), led by the National Institute of Standards and Technology (NIST)







Business is Still Booming!



TOTAL CYBERSECURITY JOB OPENINGS NATIONAL, 2023 572,392

TOTAL EMPLOYED CYBERSECURITY WORKFORCE NATIONAL, 2023 1,178,662

TOTAL CYBERSECURITY JOB OPENINGS NEW HAMPSHIRE, 2023 2,532

TOTAL EMPLOYED CYBERSECURITY WORKFORCE NEW HAMPSHIRE, 2023 5,123









Key Traits I Look For When Hiring (In Priority Order)

Ability to lead initiatives and diverse groups of people Ability to solve complex problems under pressure

Decisiveness

Ability to communicate clearly

Proactiveness and willingness to learn

Ability to work through adversity

Foundational technical skillset

Cybersecurity technical skillset







- Cybersecurity Engineer
- Cybersecurity Risk Analyst
- Privacy Analyst / Engineer
- Cybersecurity Compliance Analyst
- Cybersecurity Incident Responder
- Cybersecurity Vulnerability Analyst
- Security Operations Center (SOC) Engineer / Blue Team
- Penetration Tester / Certified Ethical Hacker (CEH) / Red Team
- Cybersecurity Threat Analyst
- Cybersecurity Developer
- Cybersecurity Data Scientist
- Cybersecurity Leadership BISO / CISO / CSO







Role Graph from Cyberseek.org



FEEDER ROLE	ENTRY-LEVEL	MID-LEVEL	ADVANCED-LEVEL
Networking Software Development	Cybersecurity Specialist	Cybersecurity Analyst	Cybersecurity Manager
Systems Engineering	Cyber Crime Analyst	Cybersecurity Consultant	Cybersecurity Engineer
Financial and Risk Analysis	Incident & Intrusion Analyst		
Security Intelligence	IT Auditor	Penetration & Vulnerability Tester	Cybersecurity Architect
IT Support			







NICCS - National initiative for Cybersecurity Careers and Studies

CIS - The Center for Internet Security is an independent, nonprofit organization with a mission to create confidence in the connected world.

- CIS Top 20
- Hardening Templates

NIST - The National Institute of Standards and Technology is a physical sciences laboratory and non-regulatory agency of the United States Department of Commerce.

- NIST CSF
- NIST 800 53

CISA - The Cybersecurity and Infrastructure Security Agency leads the Nation's strategic and unified work to strengthen the security, resilience, and workforce of the cyber ecosystem to protect critical services and American way of life.

Referential Guidance

OWASP - The Open Web Application Security Project (OWASP) is a nonprofit foundation that works to improve the security of software.

OWASP Top 10







CSA - The Cloud Security Alliance is the world's leading organization dedicated to defining and raising awareness of best practices to help ensure a secure cloud computing environment.

• White Papers and Referential Guidance

SANS Institute — The SysAdmin, Audit, Network, and Security Institute offers comprehensive, intensive training designed to help anyone, from auditors to CIOs to defend systems and networks against the most dangerous threats.

- Internet Storm Center
- Reading Room

Private Tech Industry - Microsoft, Amazon, Verizon, Google, Cisco, VMware, Crowdstrike, Splunk

Published white papers, reference architectures, comprehensive documentation, RTFM.

Cybersecurity News Outlets - Krebs, IT Security Guru, Security Weekly, Hacker News, Blogs

Opensource, Free Tools and YouTube — Download them, Watch and Learn!







Be Proactive and APPLY THY KNOWLEDGE

- Projects
- Labs
- Personal Life
- @Work

Certifications

- SANS
- ISC^2
- CSA
- CEH
- ISACA
- CompTIA

Higher Education









You Already Are A Cybersecurity Professional.

You Are Our First Line of Defense.

Thank you!





