



CAREER WORKSHOP: NEW CAREER SEEKERS IN CYBERSECURITY

Keith Chapman





By 2025, **lack of talent or human failure** will be responsible for over half of significant cybersecurity incidents

Source: Gartner Predicts 2023



700,000

**Unfilled cyber roles in the
U.S.**

(<https://www.isc2.org/Research/Workforce-Study>)



	% IN U.S. POPULATION	% IN STEM FIELD	MEDIAN STEM SALARY
White	60.1%	69%	\$71,900
Black	13.4%	9%	\$58,000
Asian or Asian American	6%	13%	\$90,000
Hispanic	16%	7%	\$60,760
American Indian or Alaska Native	1.2%	.3% *engineering	N/A

Sources: U.S. Census Bureau, Pew Research Center & Sandia National Laboratories

Black and Hispanic individuals, both underrepresented in the STEM industry, work predominantly in lower-paying STEM jobs, with median annual salaries of \$58,000 and \$60,760, respectively. Conversely, Asian or Asian American STEM workers account for an overrepresentation in the field and receive the highest median annual salaries of \$90,000.



DO YOU KNOW?

- What specific role are you targeting?
- What are your long-term career goals?
- What kind of industry do you want to work in?
- What type of work/life balance do you want?



NEW TOOLS

GENERATIVE AI



WHAT ARE COMPANIES LOOKING FOR?

TOP CYBERSECURITY SKILLS

Leaders identified the following skills as highly needed



46% cloud security



37% cyberthreat intelligence

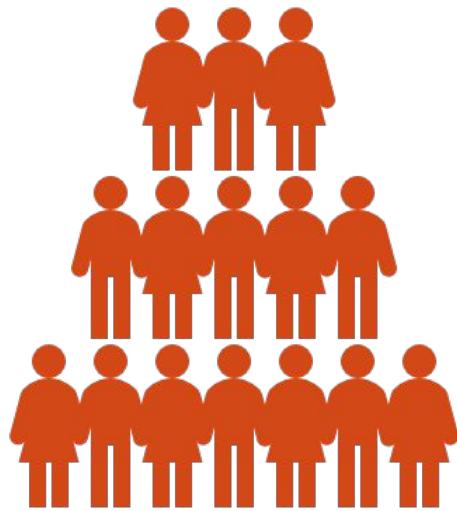


34% malware analysis

Source: WEF Global Cybersecurity Outlook 2023

IS CYBERSECURITY
REALLY ENTRY-LEVEL?





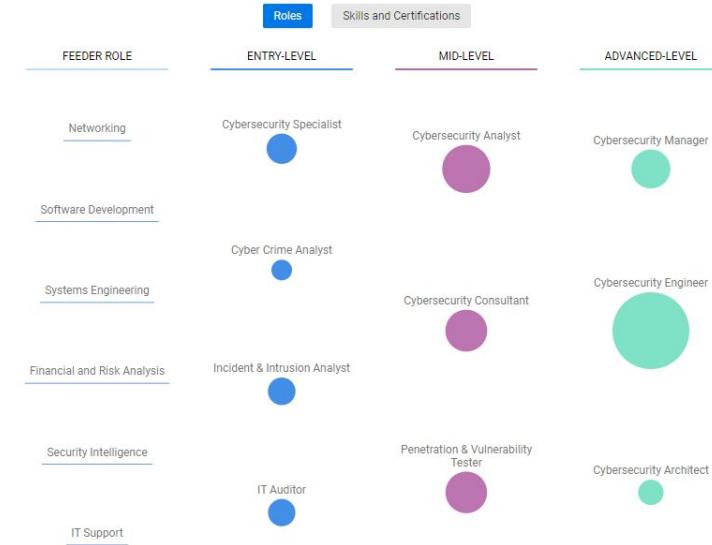
WHAT
ABOUT
“FEEDER
ROLES”?



[INTERACTIVE MAP](#)[CAREER PATHWAY](#)[EDUCATION AND TRAINING PROVIDERS](#)[ABOUT](#)

CYBERSECURITY CAREER PATHWAY

There are many opportunities for workers to start and advance their careers within cybersecurity. This interactive career pathway shows key jobs within cybersecurity, common transition opportunities between them, and detailed information about the salaries, credentials, and skillsets associated with each role. Note that jobs can span multiple career levels.



www.cyberseek.org/pathway.html



Workforce Framework for Cybersecurity (NICE Framework)

	Analyze Performs highly-specialized review and evaluation of incoming cybersecurity information to determine its usefulness for intelligence.	Specialty Areas ▾
	Collect and Operate Provides specialized denial and deception operations and collection of cybersecurity information that may be used to develop intelligence.	Specialty Areas ▾
	Investigate Investigates cybersecurity events or crimes related to information technology (IT) systems, networks, and digital evidence.	Specialty Areas ▾
	Operate and Maintain Provides the support, administration, and maintenance necessary to ensure effective and efficient information technology (IT) system performance and security.	Specialty Areas ▾
	Oversee and Govern Provides leadership, management, direction, or development and advocacy so the organization may effectively conduct cybersecurity work.	Specialty Areas ▾
	Protect and Defend Identifies, analyzes, and mitigates threats to internal information technology (IT) systems and/or networks.	Specialty Areas ▾
	Securely Provision Conceptualizes, designs, procures, and/or builds secure information technology (IT) systems, with responsibility for aspects of system and/or network development.	Specialty Areas ▾

[HTTPS://NICCS.CISA.GOV/WORKFORCE-DEVELOPMENT/NICE-FRAMEWORK](https://niccs.cisa.gov/workforce-development/nice-framework)





HOW CAN I PARTNER WITH OTHERS?

- ORGANIZATIONS
- MENTORS
- TEACHERS
- TRAINING



WHAT CERTIFICATIONS MATTER?





COMPTIA SECURITY+

- Widely recognized in the field and is DoD recognized.
- No experience required but 2 years of experience in IT administration with a security focus is recommended





ISC2 CERTIFIED IN CYBERSECURITY

- Was created as an entry-level certification to measure foundational knowledge, skills and abilities for cybersecurity roles.

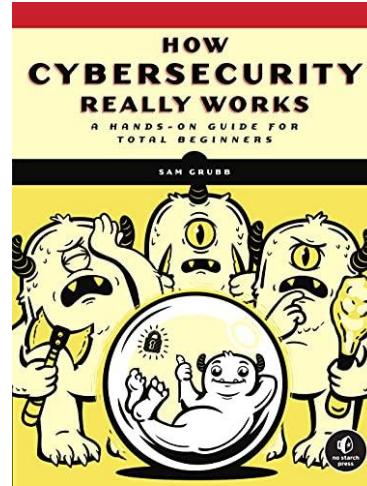
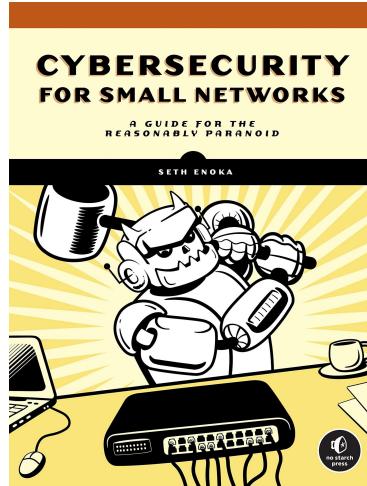
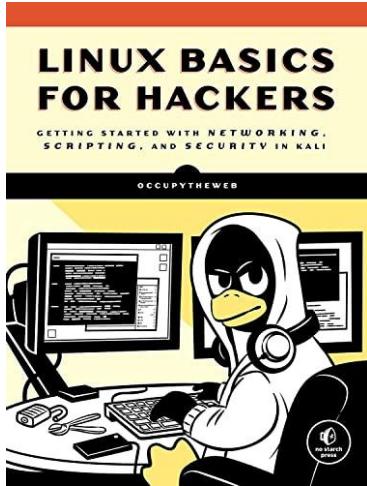




GOOGLE CAREER CERTIFICATES: CYBERSECURITY

- Designed for beginners.
- Gives hands on experience.





RECOMMENDED BOOKS

- Hands on activities
- Foundational knowledge
- Relevant to real world





TOP THREE CYBER SECURITY TRAINING PORTALS

TryHackMe

Hack the Box

CISA



SECURE THE BAG

**WHAT DOES MY LIFE LOOK
LIKE 3 YEARS FROM NOW?**

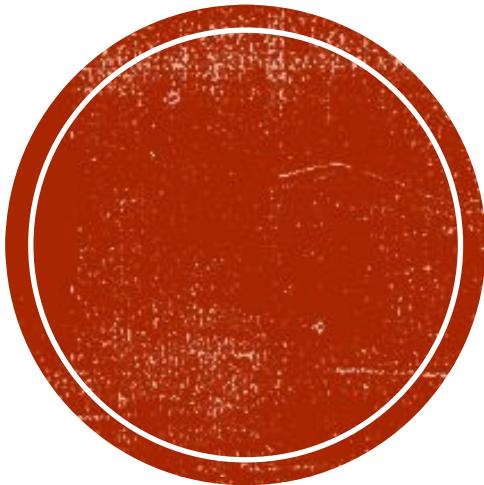




WRITE IT DOWN!

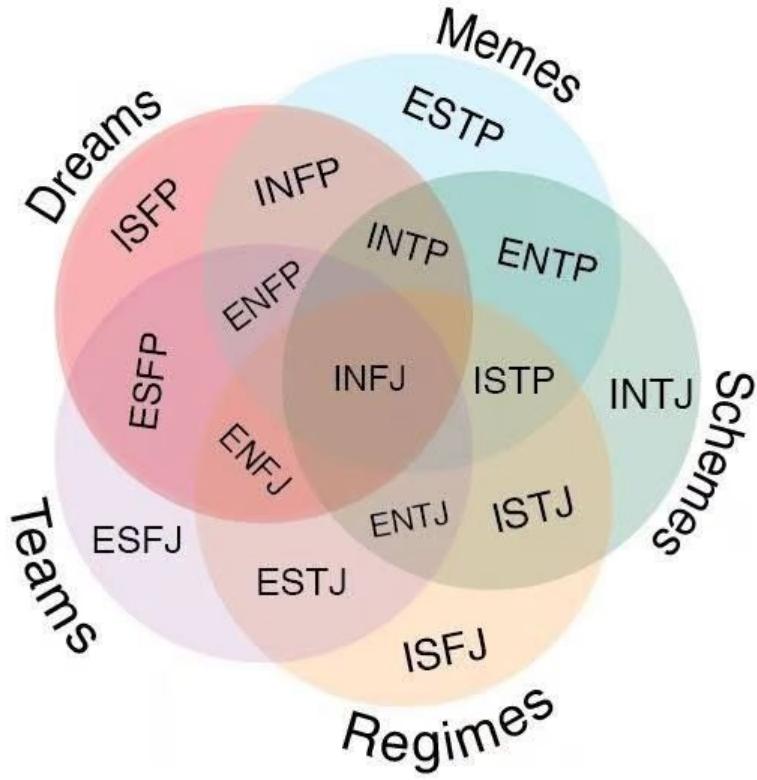
UNDERSTAND YOURSELF

MENTALITY



ISTJ Responsible Executors	ISFJ Dedicated Stewards	INFJ Insightful Motivators	INTJ Visionary Strategists
ISTP Nimble Pragmatics	ISFP Practical Custodians	INFP Inspired Crusaders	INTP Expansive Analyzers
ESTP Dynamic Mavericks	ESFP Enthusiastic Improvisors	ENFP Impassioned Catalysts	ENTP Innovative Explorers
ESTJ Efficient Drivers	ESFJ Committed Builders	ENFJ Engaging Mobilizers	ENTJ Strategic Directors





**WHAT UNIQUE
CHALLENGES DO
UNDER-REPRESENTED
PEOPLE GROUPS HAVE?**





**TAKE CARE
OF
YOURSELF.**

EXERCISE

DEEP BREATH

LAUGH

PRACTICE GRATITUDE

GET YOUR SLEEP

JOURNAL

REFRAME YOUR THINKING

MEDITATION

CONNECT WITH OTHERS

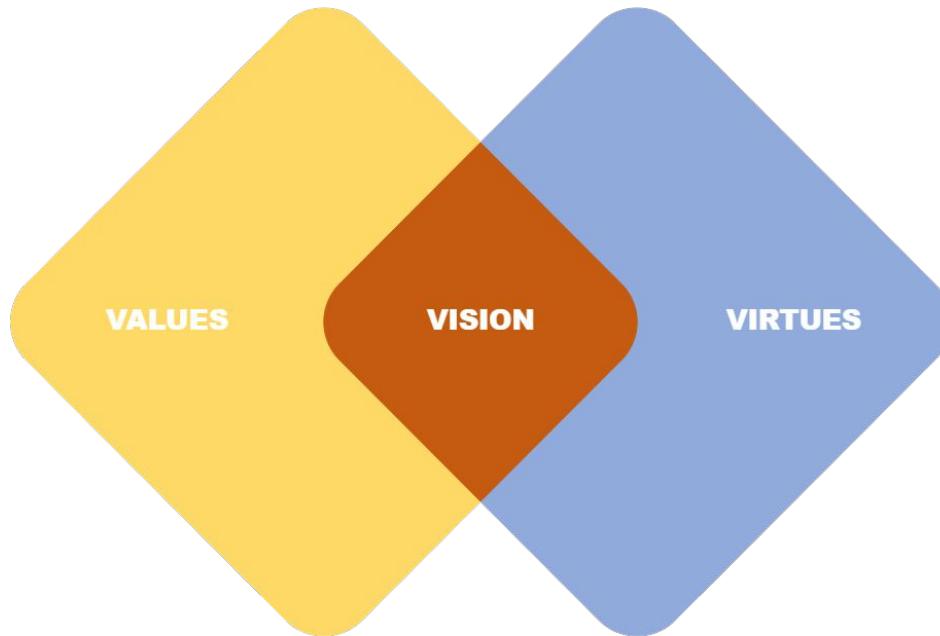
**WHAT
DOES
SUCCESS
LOOK
LIKE?**

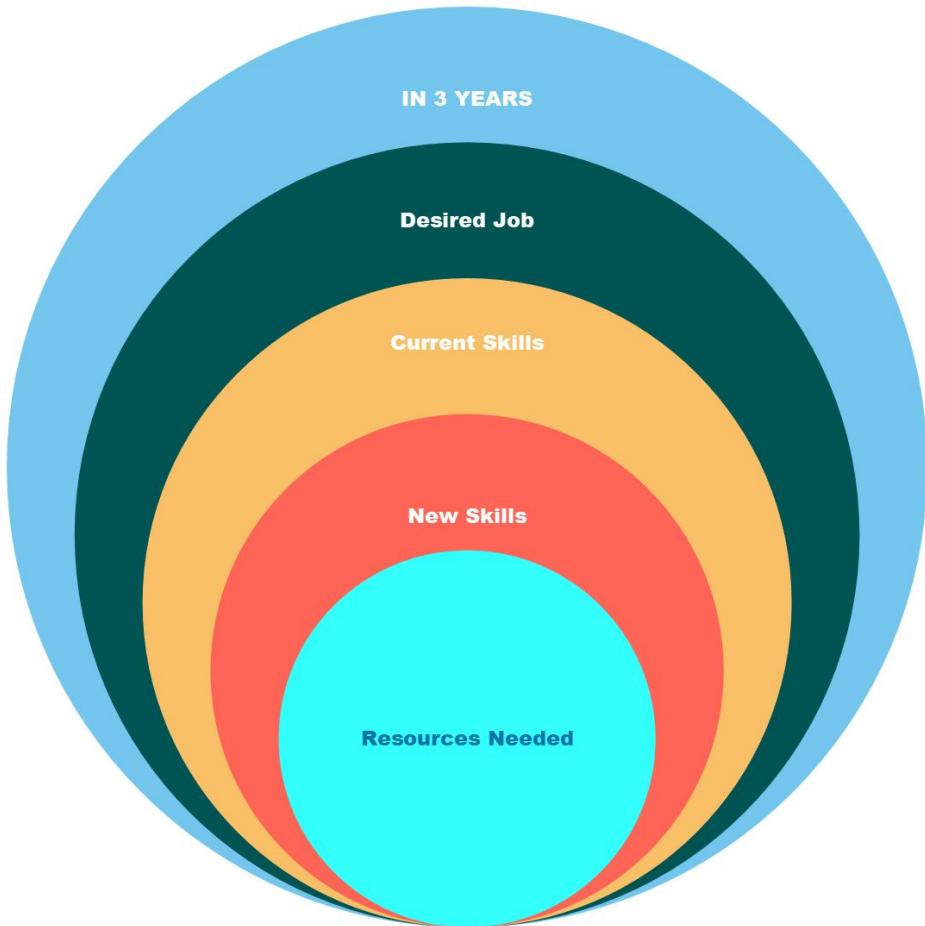


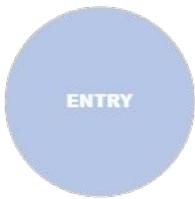
MY JOB HAS THIS COOL THING

**WHERE IF YOU DO YOUR JOB VERY WELL,
YOU GET TO DO OTHER PEOPLES JOB TOO**









BIG VILLAGE @ DEF CON 31



SPEAKER

KEITH CHAPMAN

CAREER workshop: NEW CAREER
SEEKERS in cybersecurity

3:00 pm August 11, 2023

