

# Tech Foundation Group Meeting May 2020

Razi Rais | Group Founder

<https://razibinrais.com>

# Trends: Cybersecurity Industry

- Through 2022, 30% of all AI cyberattacks will leverage training-data poisoning, AI model theft or adversarial samples to attack AI-powered systems.
- By 2025, evidence-based security practices will be a core capability of successful security and risk management programs.
- In response to the growing security skills gap and attacker trends, extended detection and response (XDR) tools, machine learning (ML), and automation capability are emerging to improve security operations productivity and detection accuracy.
- Crowdsource Security: 55% of participants in a research study conducted by Enterprise Strategy Group (ESG) and Bugcrowd indicated that they are familiar with crowdsourced cybersecurity and already use it for some areas. Another 32% were either interested in or expecting to participate in the next 12 months. Ex. Testing & vulnerability.

<https://www.gartner.com/document/3880667>

<https://www.gartner.com/document/3981492>

<https://www.gartner.com/document/3970506>

<https://www.gartner.com/document/3975469>

# Trends: Cybersecurity Industry

- Through 2022, 30% of all AI cyberattacks will leverage training-data poisoning, AI model theft or adversarial samples to attack AI-powered systems.
- By 2025, evidence-based security practices will be a core capability of successful security and risk management programs.
- In response to the growing security skills gap and attacker trends, extended detection and response (XDR) tools, machine learning (ML), and automation capability are emerging to improve security operations productivity and detection accuracy.
- Crowdsource Security: 55% of participants in a research study conducted by Enterprise Strategy Group (ESG) and Bugcrowd indicated that they are familiar with crowdsourced cybersecurity and already use it for some areas. Another 32% were either interested in or expecting to participate in the next 12 months. Ex. Testing & vulnerability.

<https://www.gartner.com/document/3880667>

<https://www.gartner.com/document/3981492>

<https://www.gartner.com/document/3970506>

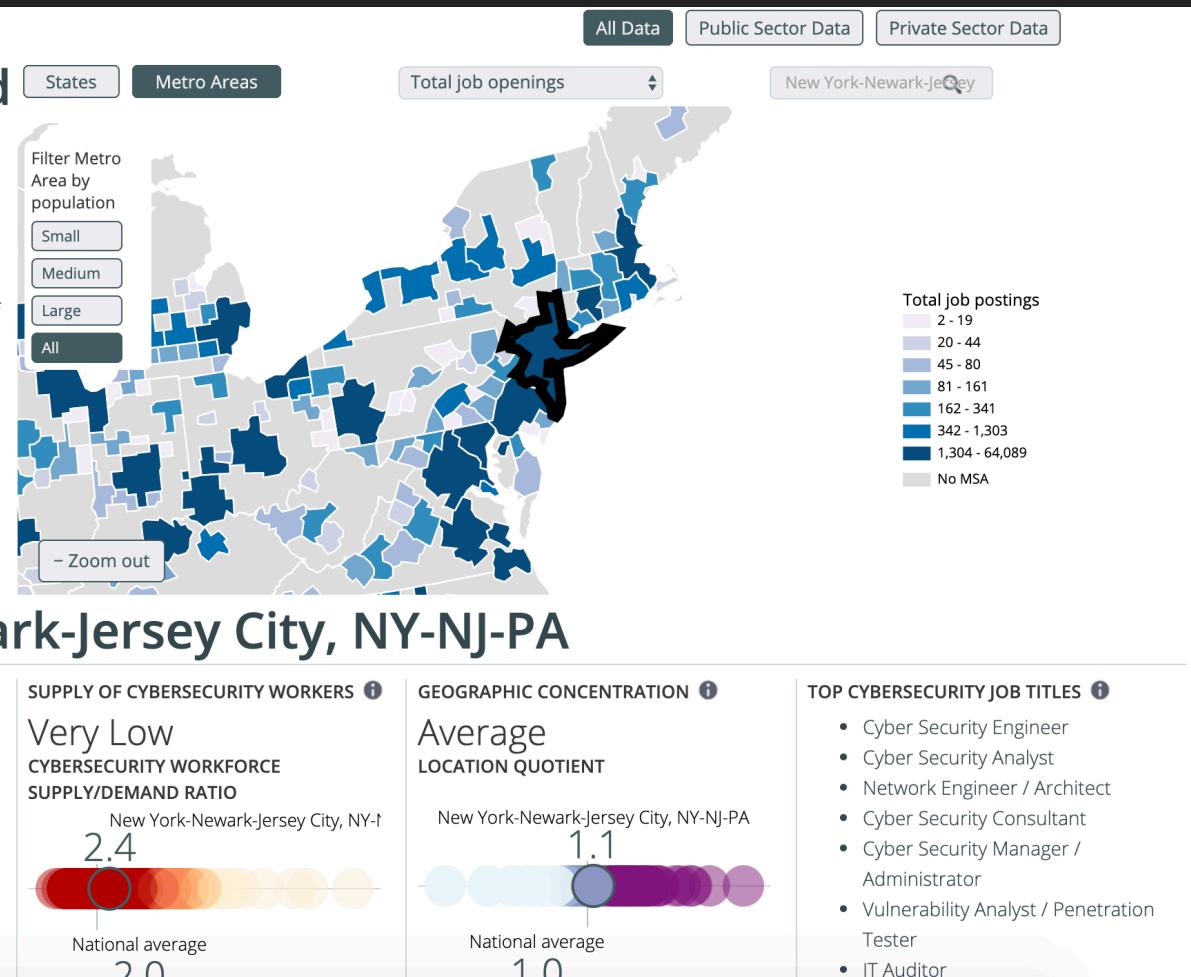
<https://www.gartner.com/document/3975469>

# Cybersecurity Jobs

## Cybersecurity Supply/Demand Heat Map

Cybersecurity talent gaps exist across the country. Closing these gaps requires detailed knowledge of the cybersecurity workforce in your region. This interactive heat map provides a granular snapshot of demand and supply data for cybersecurity jobs at the state and metro area levels, and can be used to grasp the challenges and opportunities facing your local cybersecurity workforce.

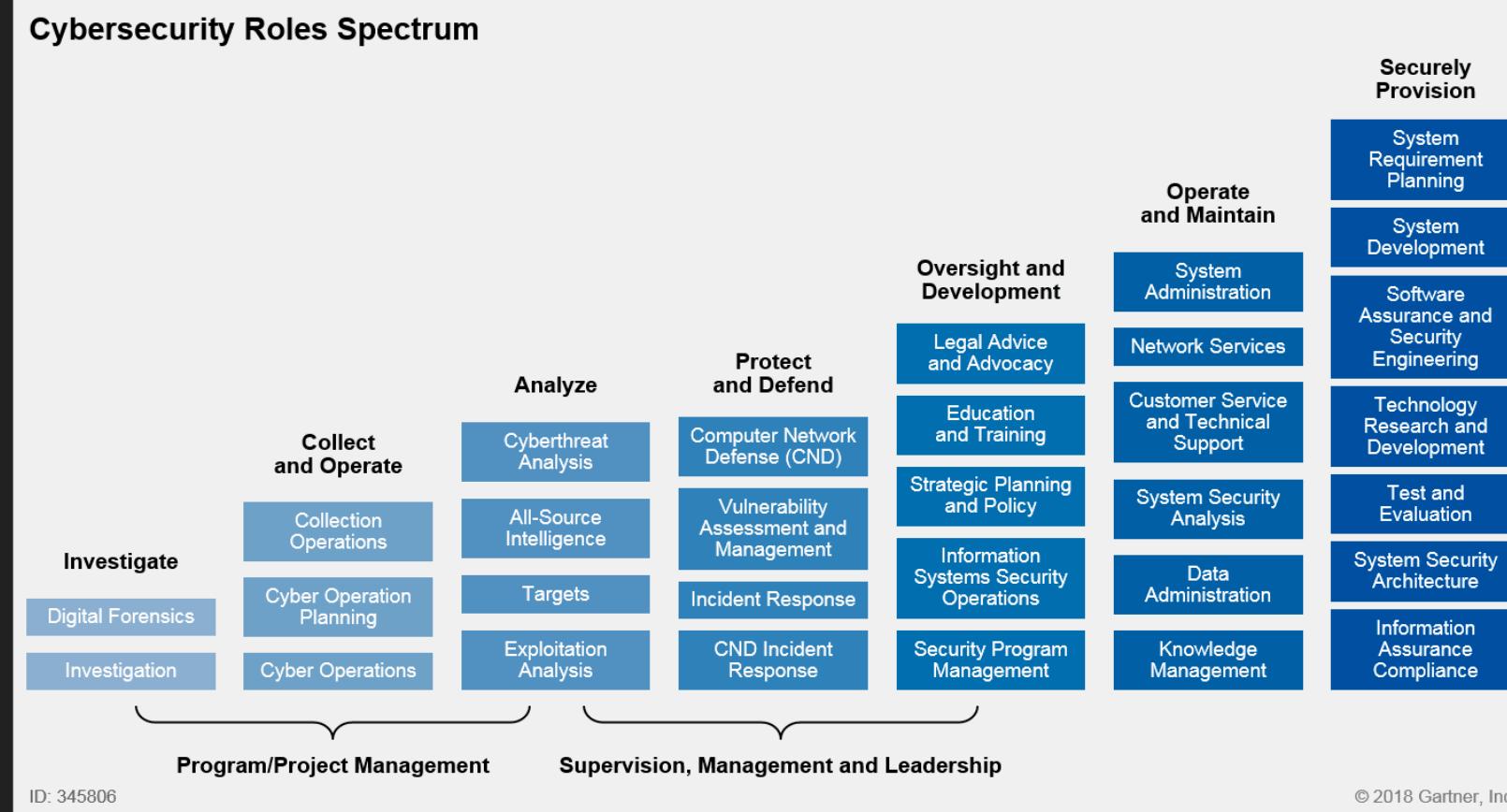
[Share](#) [Embed](#)



\*CyberSeek was developed by Burning Glass Technologies and CompTIA through a grant issued by the National Institute of Standards and Technology (NIST) and supported by the National Initiative for Cybersecurity Education (NICE).

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

# Cybersecurity Role Spectrum



# Cybersecurity Path

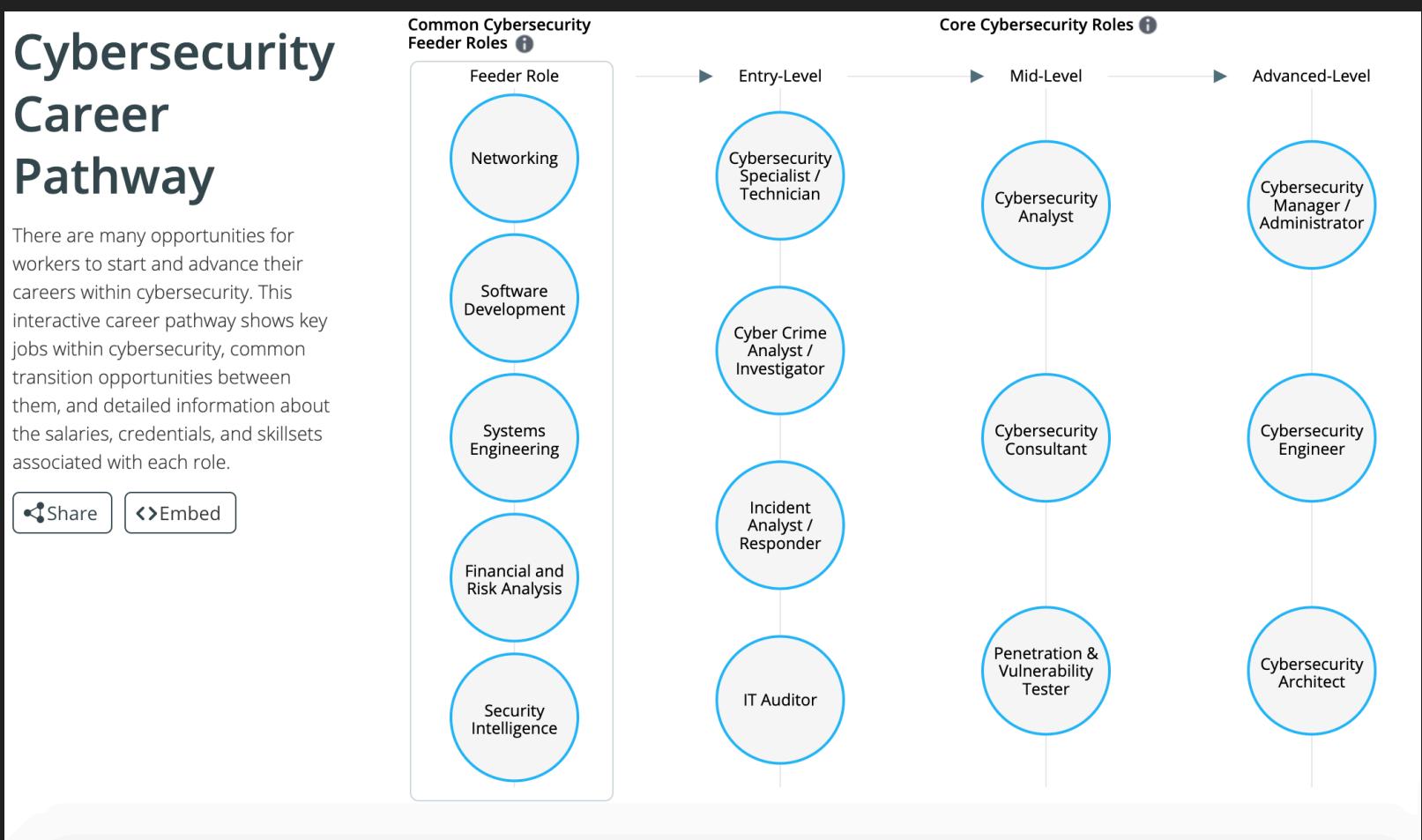
<https://www.cyberseek.org/pathway.html>

## Cybersecurity Career Pathway

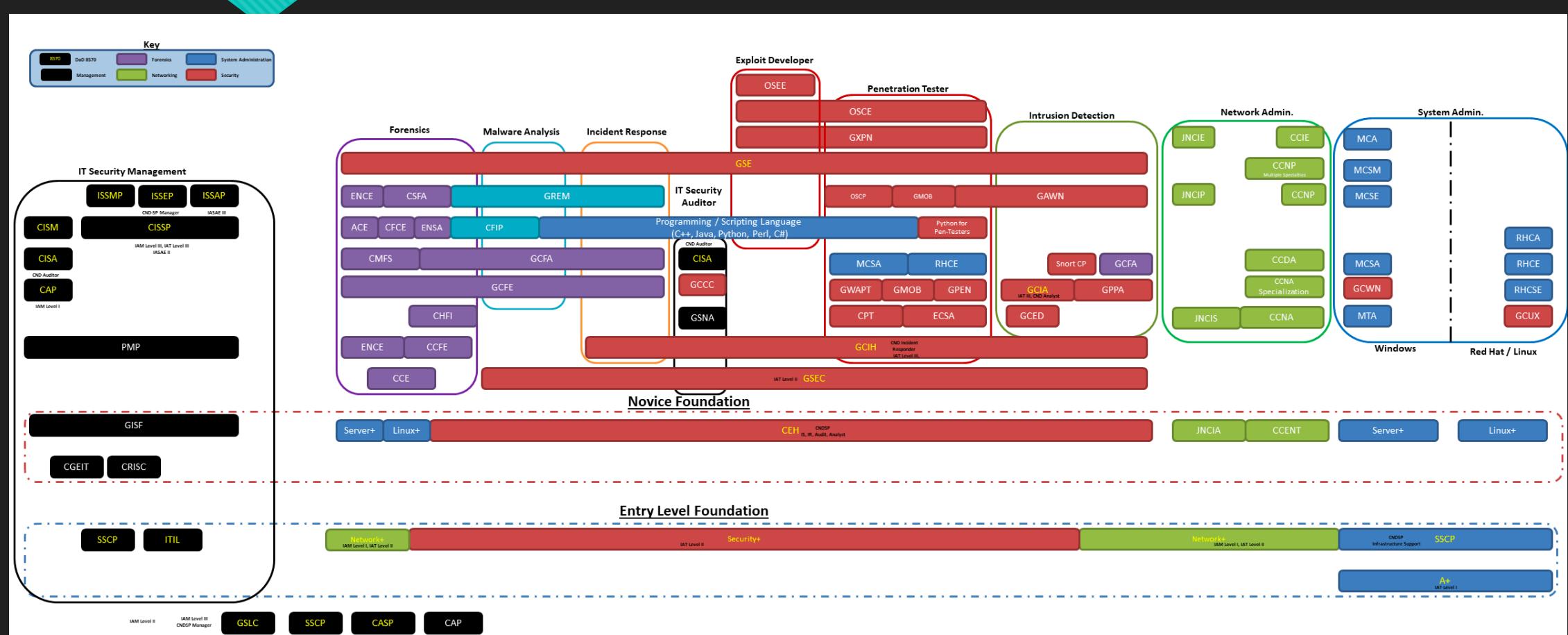
There are many opportunities for workers to start and advance their careers within cybersecurity. This interactive career pathway shows key jobs within cybersecurity, common transition opportunities between them, and detailed information about the salaries, credentials, and skillsets associated with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

Share

Embed



# Cybersecurity Path



# Free & Low Cost Learning Resources

- NIST Learning Resources: <https://www.nist.gov/itl/applied-cybersecurity/nice/resources/online-learning-content>
- SANS Resources: <https://www.sans.org/free>
- Microsoft Certification: <https://docs.microsoft.com/en-us/learn/certifications/exams/az-500?tab=tab-learning-paths>
- Microsoft Security General: <https://docs.microsoft.com/en-us/learn>, <https://www.microsoft.com/en-us/securityengineering/sdl>
- EC Council: <https://www.eccouncil.org/free-cybersecurity-resources/>
- Others:
  - <https://github.com/MicrosoftLearning/AZ-500-Azure-Security>
  - <https://github.com/fabionoth/awesome-cyber-security>
  - <https://github.com/onlurking/awesome-infosec>