



## How to start and build a CyberSecurity Career



Pace & Space (5 min Q&A @ End)  
45 Min / 27 Slides = 1:30m Per



# Starting a Cybersecurity career

01

What does it take?

02

What does it look like?

03

The job titles are so  
confusing?

04

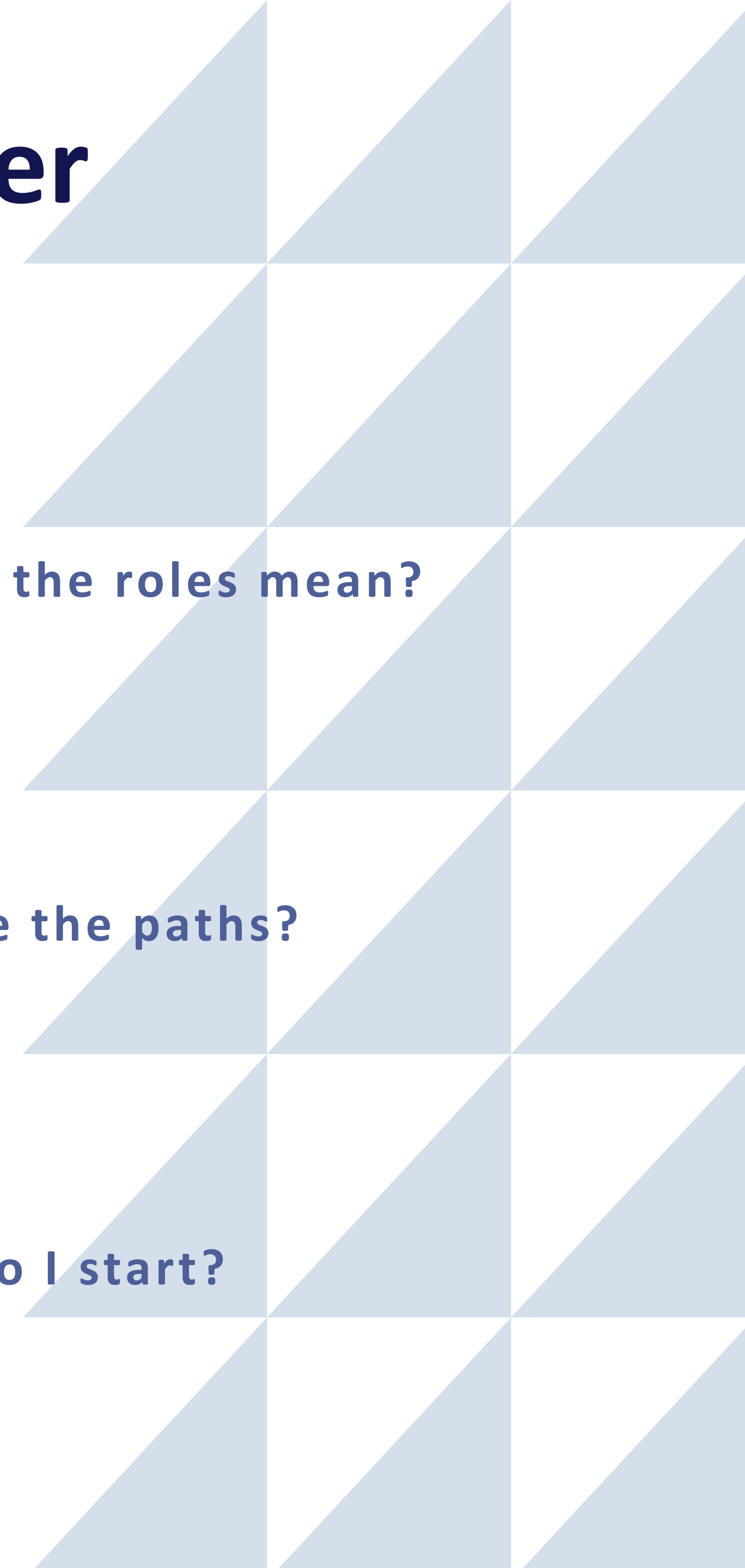
What do the roles mean?

05

What are the paths?

06

Where do I start?





# Why is it called Breaking in?

How it was done over a decade ago, isn't something we can keep doing today.

The need is too high, too strong, and we simply need more people than the old way can support.





# Neckbeards

## Grouchy Computer People (so angry)

- Can be seen as pedantic, overly focused on niche interests, condescending, or antisocial.





# The way it used to be (10+ years)



## System Administrator

Sysadmins understand operating systems, networks, software applications, and hardware configurations. This foundational knowledge is crucial for understanding attack vectors and vulnerabilities.



## Network Engineer

Having deep knowledge about network configurations, protocols, and services allows for better understanding of network-based threats and how to mitigate them.



## Software Developer

Developers understand the intricacies of software design, data structures, algorithms, and system architecture, which are vital when evaluating vulnerabilities or designing secure software.





# No longer works

## We have to change

With the increasing number and sophistication of cyber threats, the demand for skilled cybersecurity professionals has skyrocketed.





## Recruiters

Don't really know enough, or understand the industry enough to find the right candidate.

## Applicants

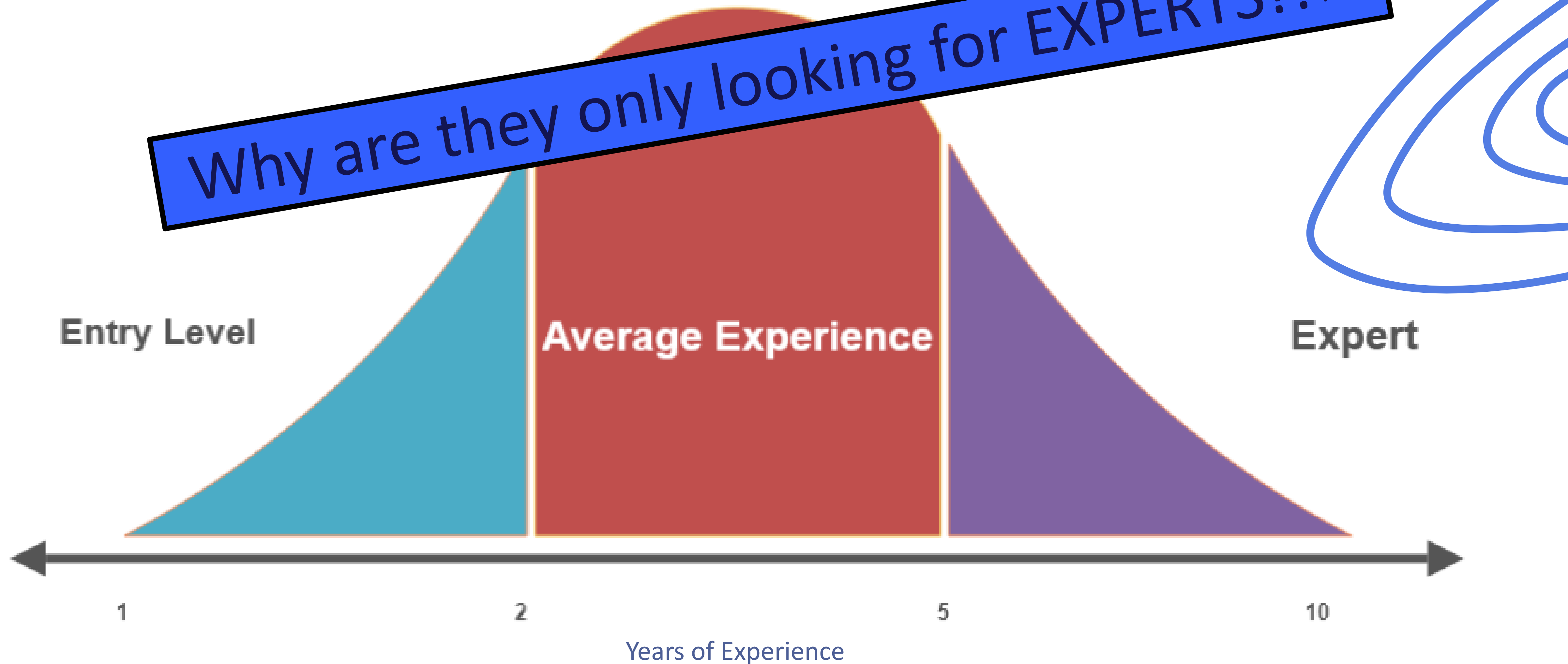
Don't understand “the game”, what it takes, and how long it takes to obtain a position.





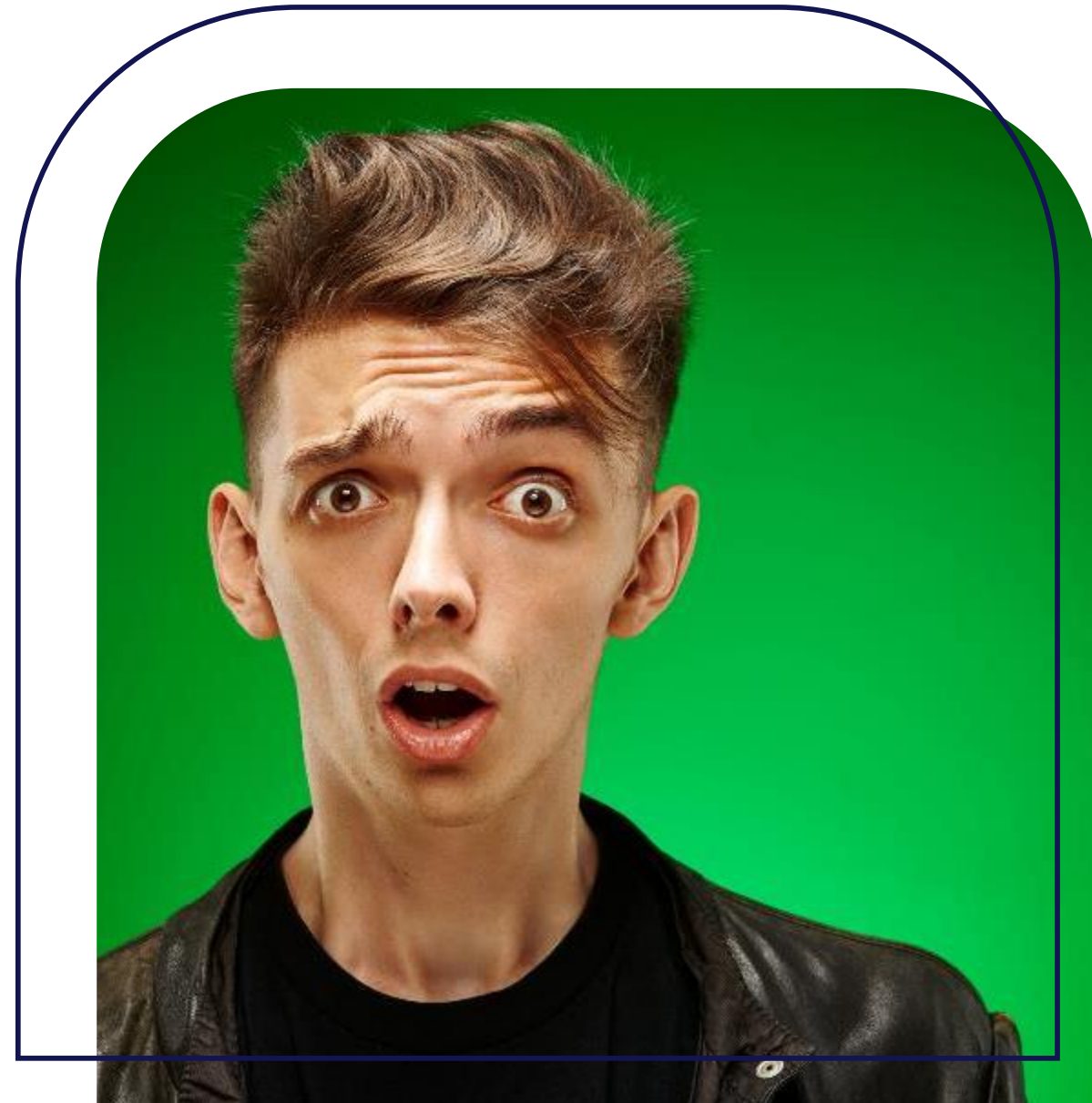
Where are the jobs?

Why are they only looking for EXPERTS!?!>





# Looking for a job 'be like'



Confusing

Overwhelming

Vague Job Descriptions

Multiple Tracking Systems

Lack of Feedback



Frustrating

Rejection

Inconsistent Responses

Long and Disparate processes

Impersonal



Painful

Vulnerable

Uncertainty

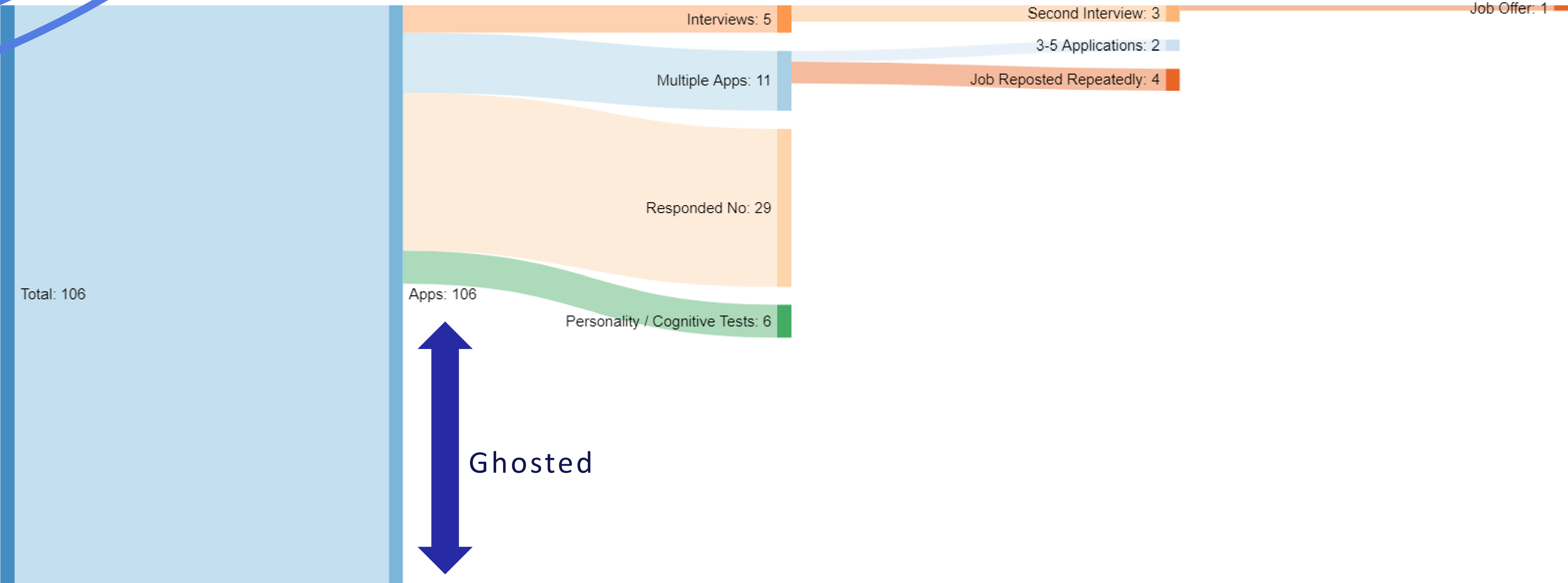
Identity

Self Worth



# What a easy job hunt look like

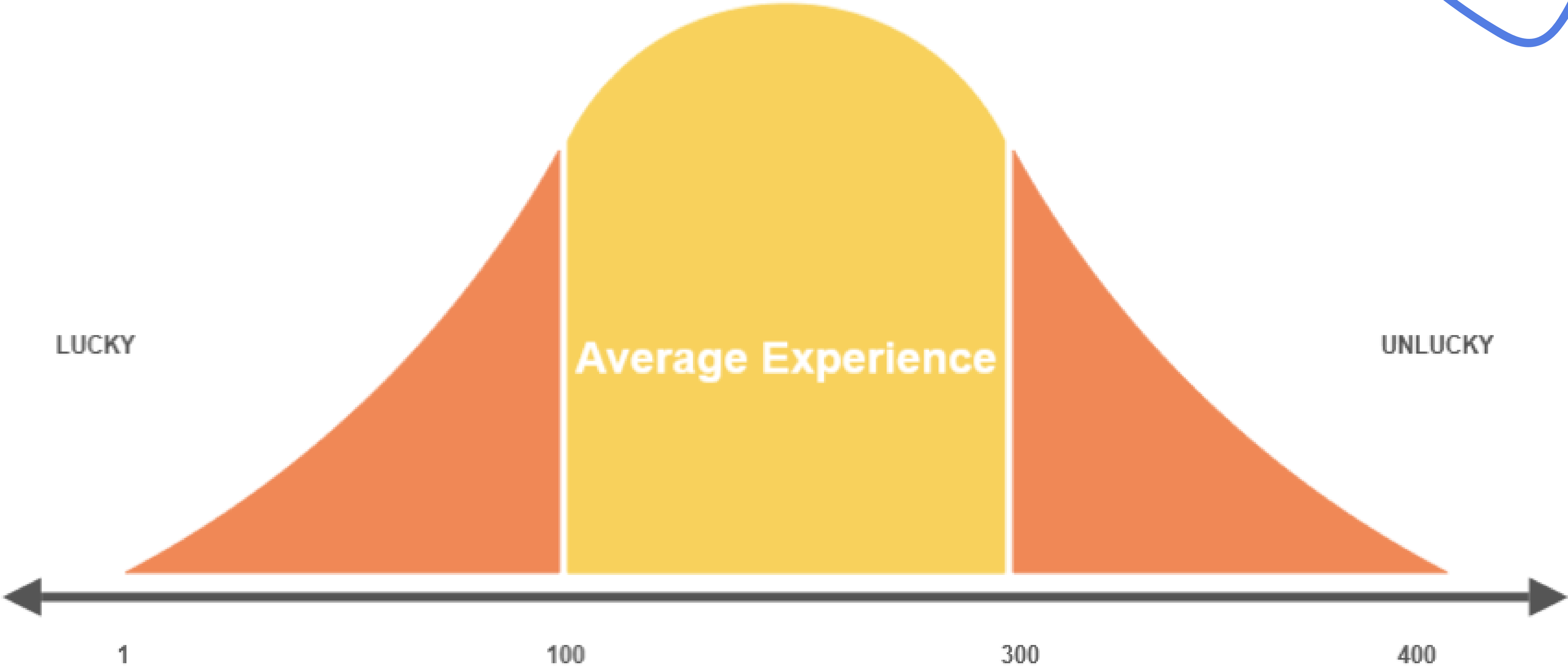
Actual Experience





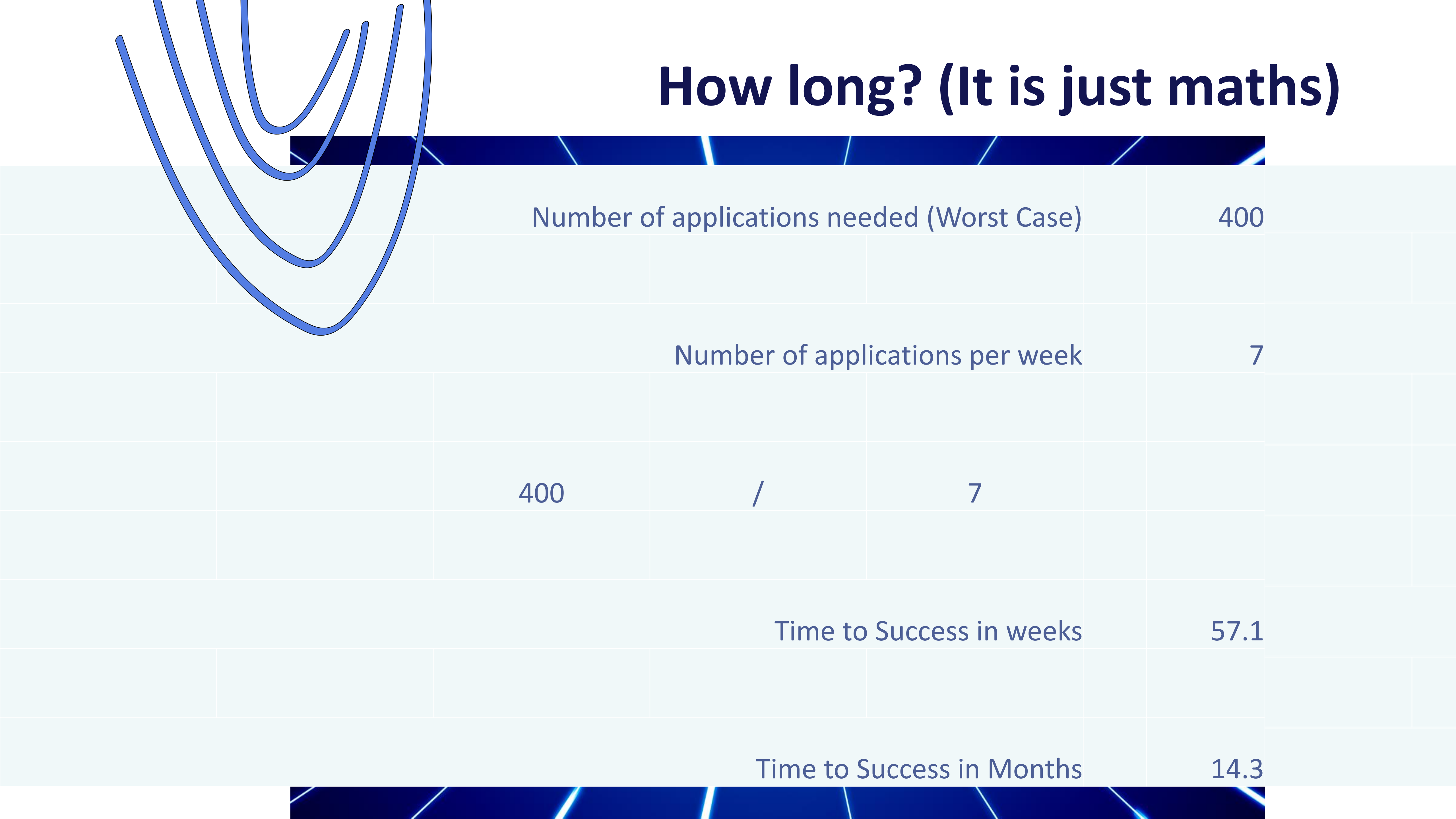
What the full  
experience  
looks like

Amount of Applications





# How long? (It is just maths)





# How long? (It is just maths)



Number of applications needed (Worst Case)	400
--	-----


Number of applications per week	14
---------------------------------	----

400	/	14
-----	---	----

Time to Success in weeks	28.6
--------------------------	------

Time to Success in Months	7.14
---------------------------	------



A person is walking away from the viewer down a dirt path that stretches into the distance. The path is flanked by wooden fences and green grass. In the background, there are rolling hills and a bright, glowing light source on the horizon, creating a lens flare effect. The sky is filled with soft, white clouds. In the top left corner, there are several concentric white circles of varying sizes.

**"A journey of a  
thousand miles begins  
with a single step."  
~Tao Te Ching**



# Effort and Time



- Perseverance
- Fierce interest
- Emotional Management
- Understanding the Game
- NOT giving up



In person / Relocate?



Remote?



# “A goal without a plan is only a dream.”

- Brian Tracy





# Having a Plan

## HAVE TARGETS

Identify 1-3 Work Roles  
“I don’t care; I’ll take any  
job just won’t do.”

## CONDUCT RESEARCH

Understand clearly what it takes  
to become attractive for those  
work roles

## PROFESSIONAL ASSOCIATIONS

Identify, select, and join  
relevant associations

## SOCIAL NETWORKING

Build & Nurture LinkedIn  
Attend local cybersecurity  
events and build your  
social connections

## IMPROVE ONESELF

Develop your Skills  
Obtain Certifications  
Improve your Abilities

## HEALTH ENGAGEMENT

Physical Health  
Mental Health  
Emotional Health

# Major Work Roles



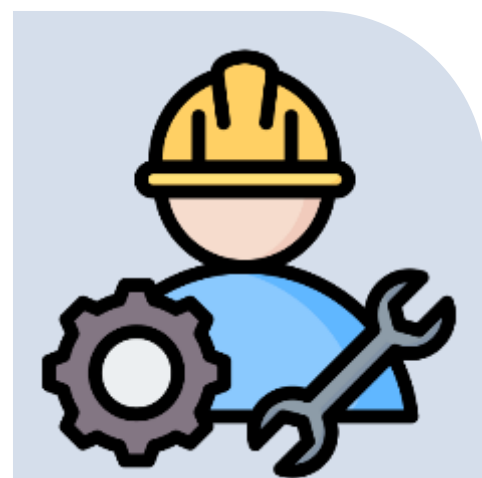
## ANALYST

Primarily focused on Detection and Response.



## ARCHITECT

Designs the overarching security infrastructure and strategy.



## ENGINEER

Designs, implements and maintains security solutions.



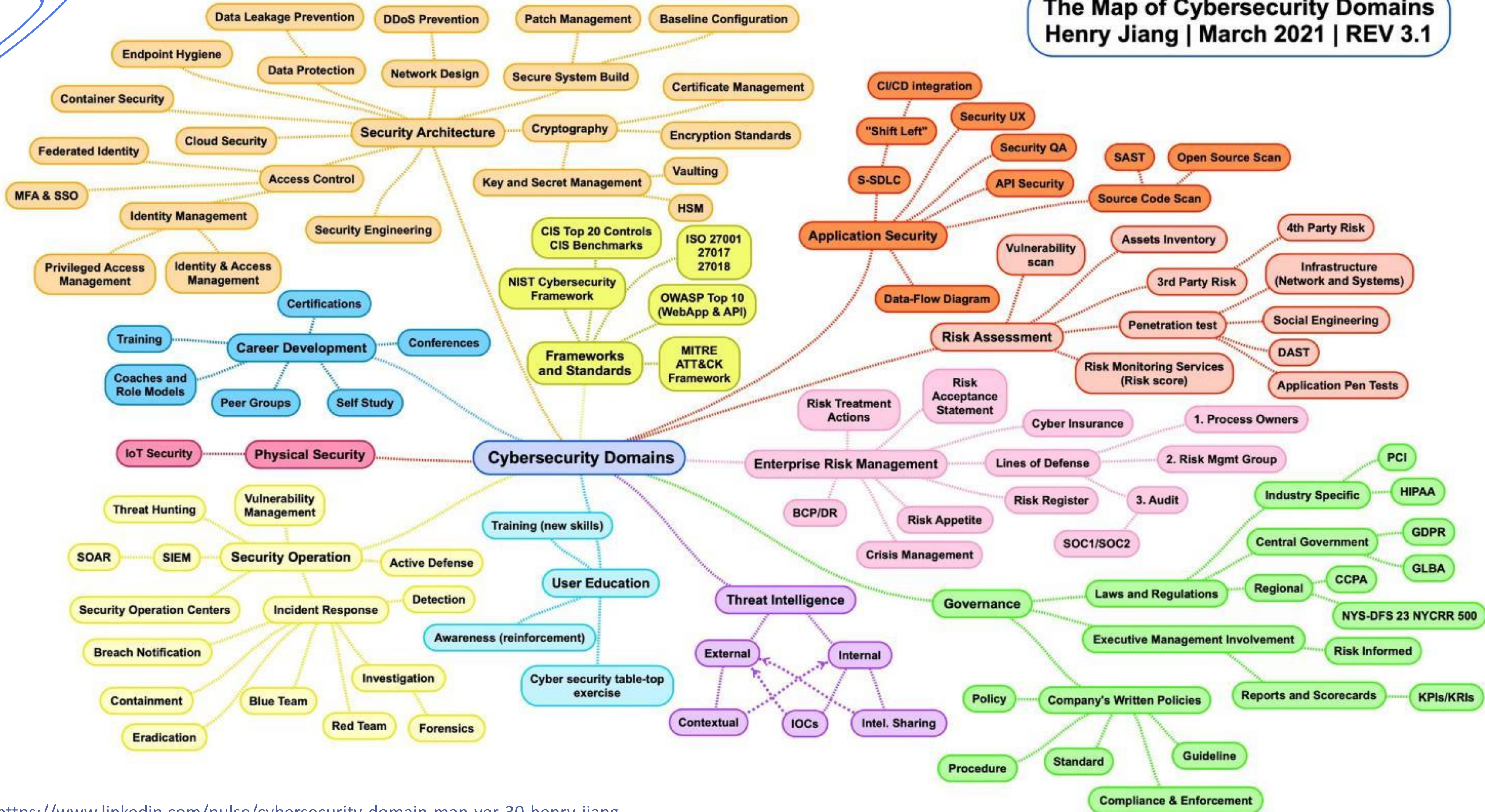
## CONSULTANT

Provides expert guidance and advance on cybersecurity to organizations.

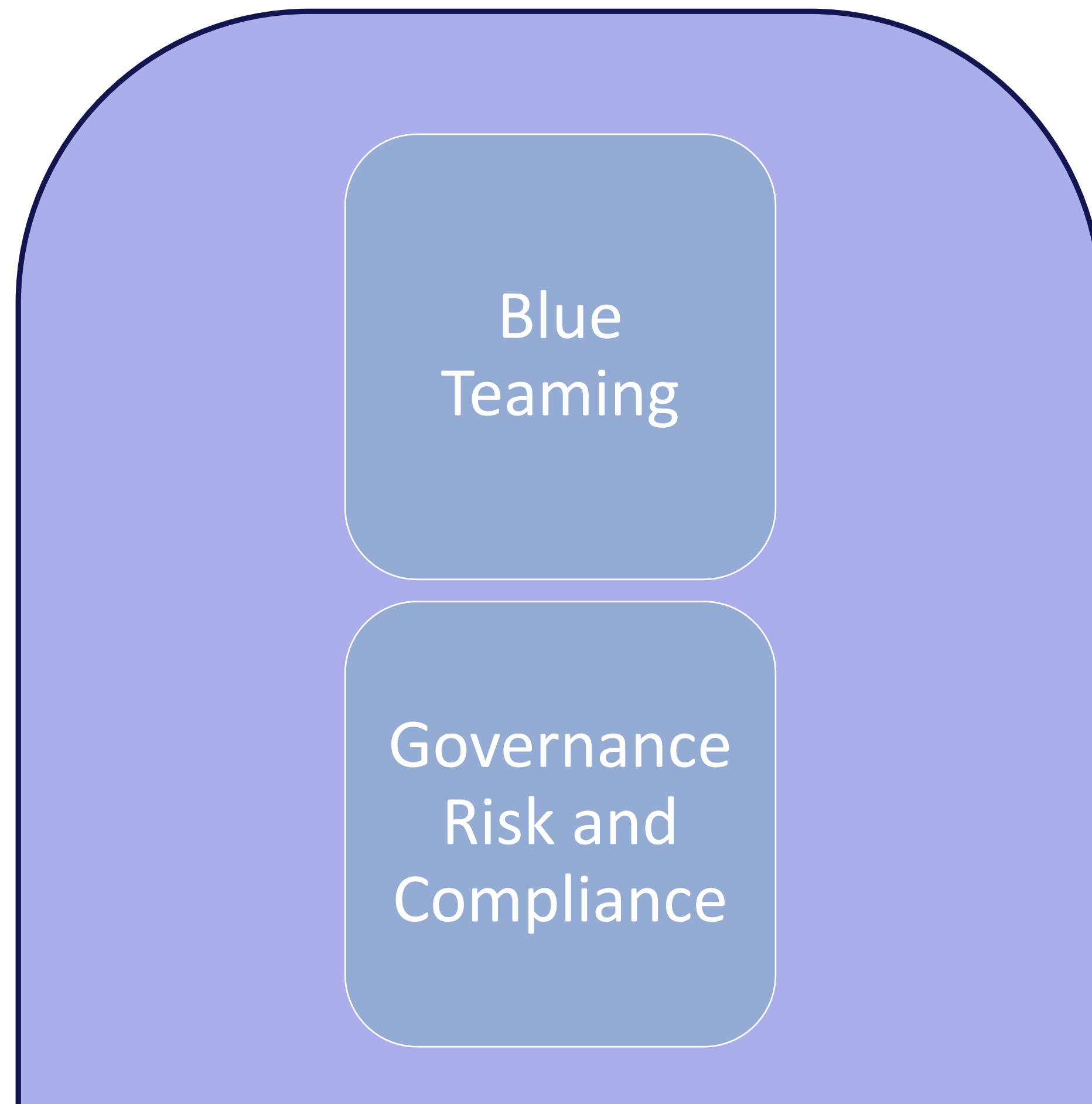


# The Map of Cybersecurity Domains

Henry Jiang | March 2021 | REV 3.1







# Entry Level Zones

**Have to start SOMEWHERE**

Most CyberSecurity Roles are not directly accessible from Entry Level.



# Entry Level Analyst Roles

- Network Security Analyst
- Information Security Analyst
- CyberSecurity Analyst
- Endpoint Security Analyst
- Cloud Security Analyst
- Threat Intelligence Analyst
- Vulnerability Management Analyst
- Security Compliance Analyst
- SOC Analyst
- Incident Response Analyst
- Digital Forensics Analyst
- Application Security Analyst





# Entry Level Engineering Roles

Network Security Engineer

CyberSecurity Engineer

Cloud Security Engineer

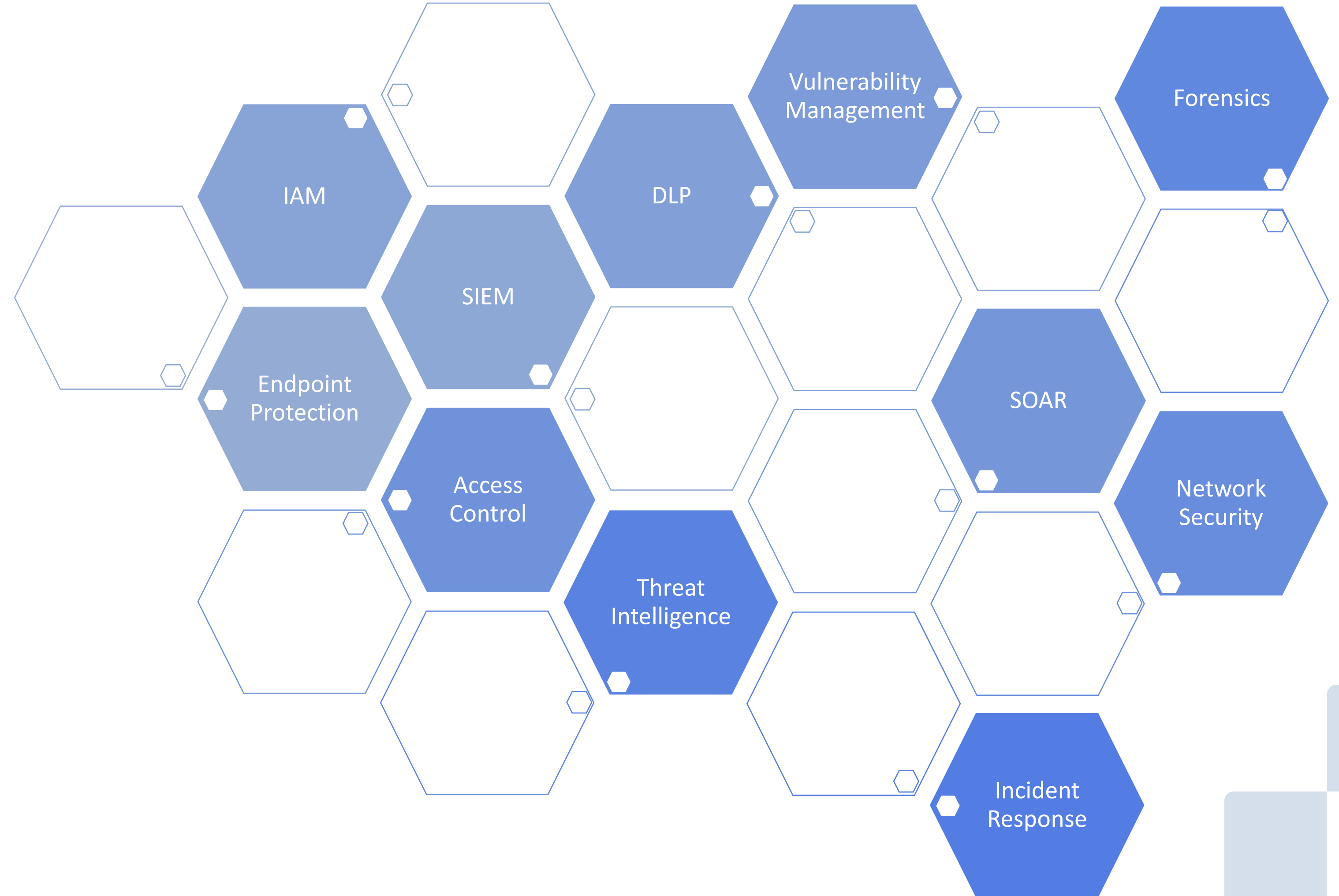
Endpoint Security Engineer

Infrastructure Security Engineer

IAM Security Engineer

Incident Response Engineer

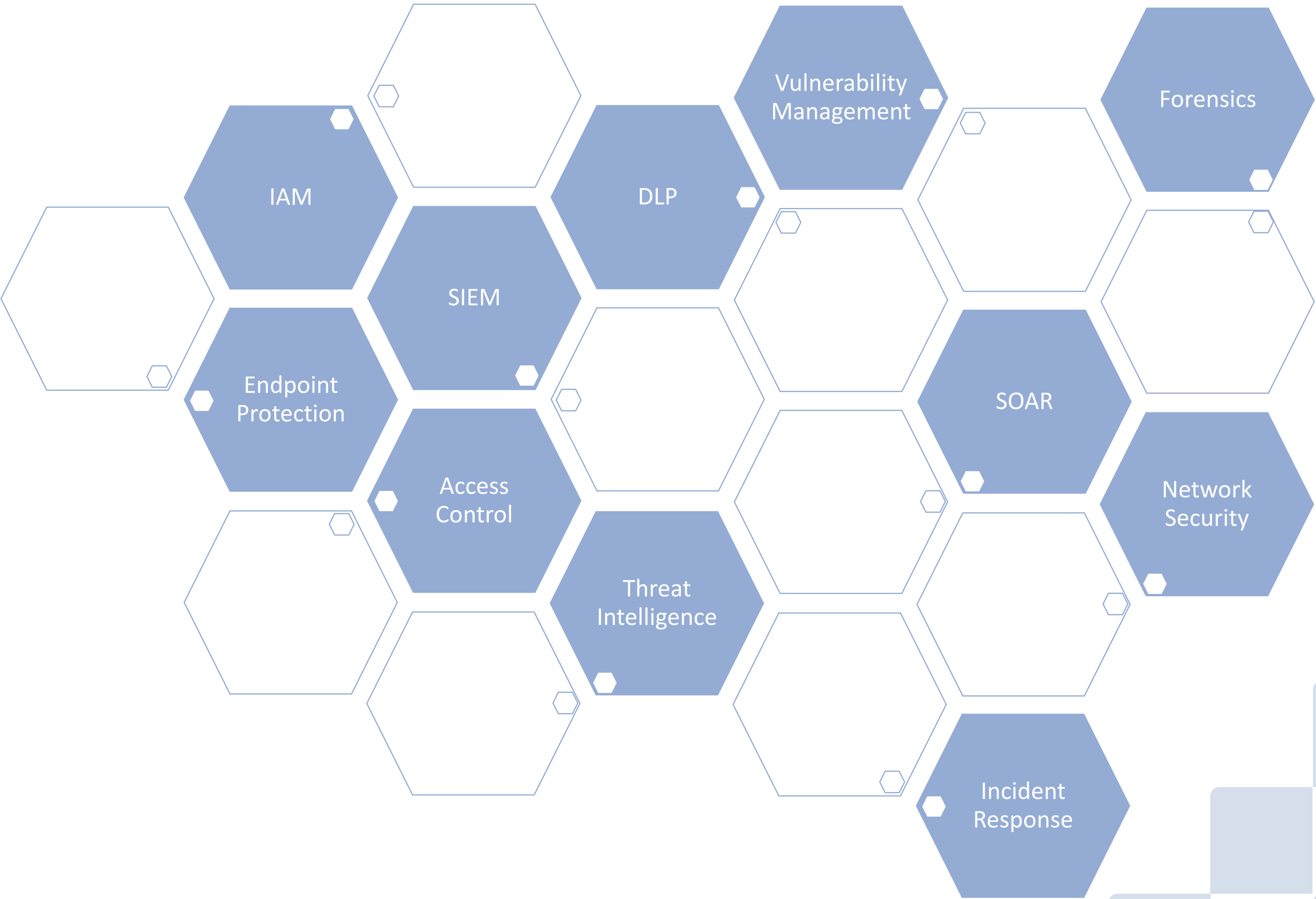
Application Security Engineer





# Entry Level Architecture Roles

- Enterprise Security Architect
- Network Security Architect
- Cloud Security Architect
- Endpoint Security Architect
- IAM Security Architect
- Zero Trust Architect
- Security Solutions Architect
- Data Security Architect





# Entry Level Consultant Roles

Information Security Consultant

IAM Security Consultant

Network Security Consultant

Cloud Security Consultant

CyberSecurity Consultant

Incident Response Consultant

Digital Forensics Consultant

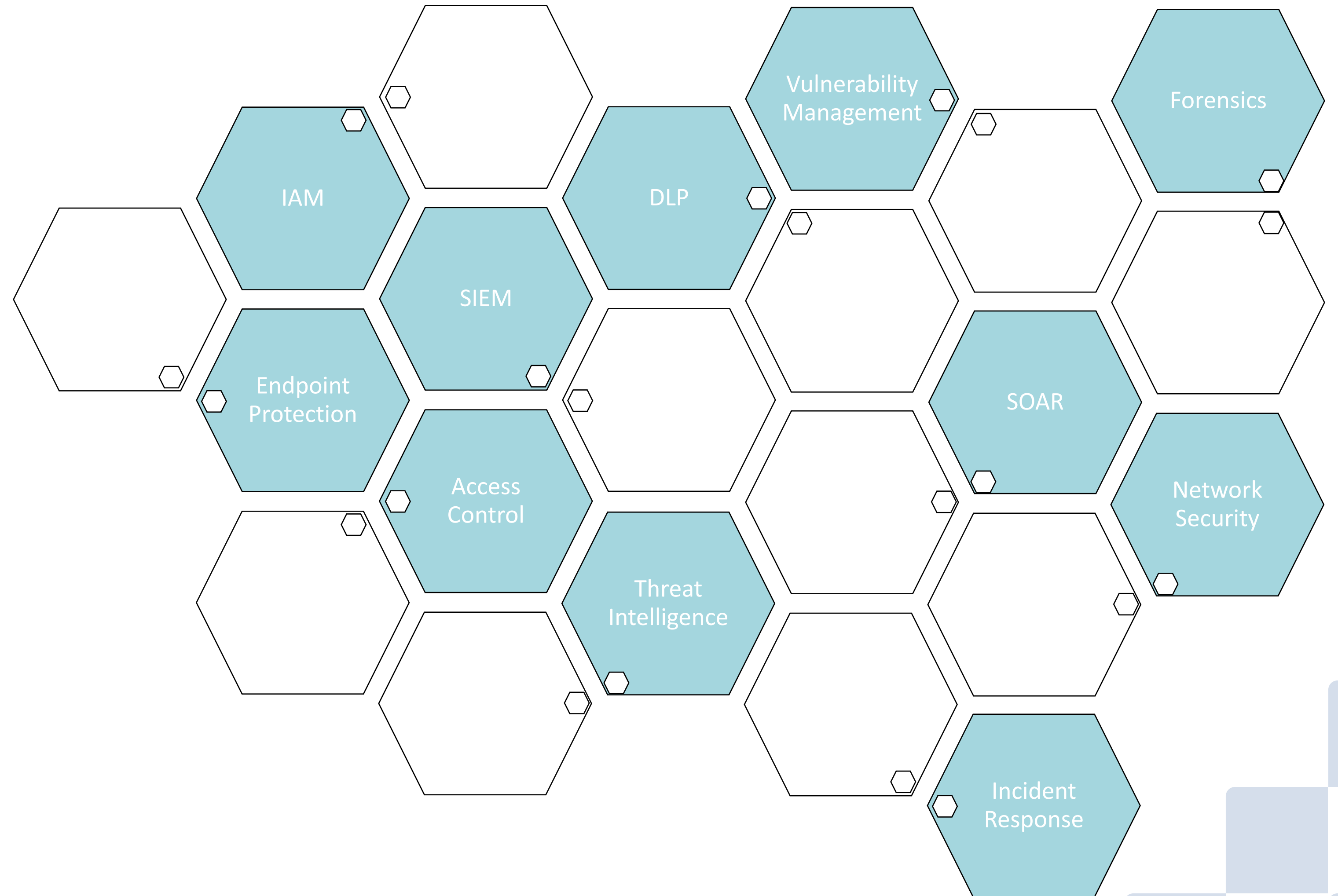
GRC Consultant

Application Security Consultant

IoT Security Consultant

Security Awareness Consultant

Application Security Consultant

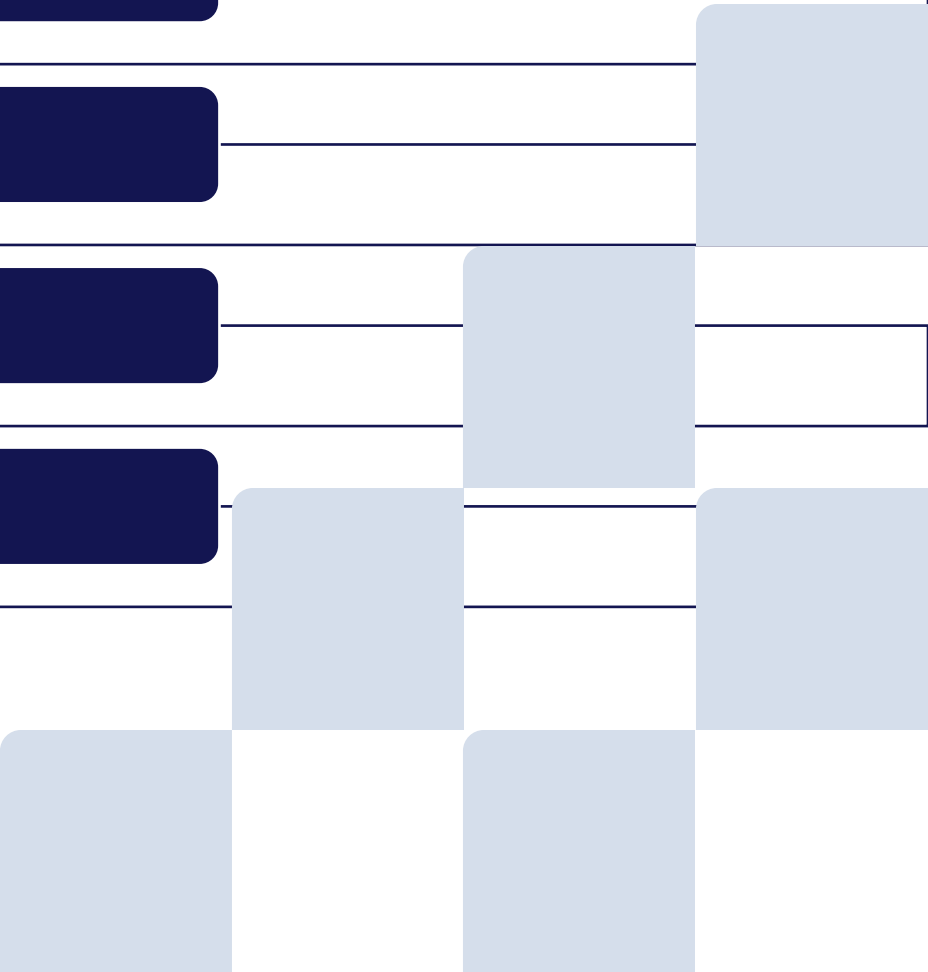




# Entry Level GRC Roles

- Governance Analyst
- Compliance Analyst
- 3rd Party Risk Analyst
- Policy & Procedure Analyst
- Privacy Analyst
- ISSO (Information Security Officer)
- Risk Analyst
- Risk Advisory
- Risk Assessment
- Service Delivery Manager
- Technical Account Manager
- Technical Project Manager

- Policies
- Regulations
- Privacy
- Data Security
- Risk Management
- Assessments
- Change Management
- Business Continuity
- Advisory
- Governance
- Disaster Recovery
- Resiliency







# It is clear what CISOs want

## PICK a ROLE

After years of first-person engagement with CISOs and hiring managers across the cybersecurity industry, they don't want to see your name on every application they get across the company.

PICK A ROLE



# The many paths one can take.



## SELF TAUGHT

Skill Development  
Flexible  
Portfolio Building  
Social Networking  
Problem Solving



## EDUCATION

Academia  
Boot Camps  
Certifications  
Badges  
Self-Taught

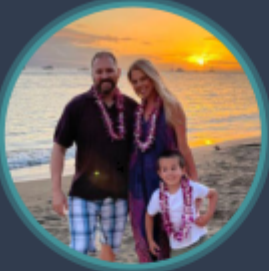


## CERTIFICATIONS

CompTIA Sec+  
CompTIA Net+  
CompTIA CYSA+  
Cloud+ / CCSK



# Modern Resumes



SKILLS

Windows Systems  
Python  
Networking  
Linux Systems  
Teamwork  
Project Management  
Budget Planning & Management  
Metrics-Based Operations Management  
Risk Mitigation

INTERESTS

Cybersecurity Operations Management, Leadership, Machine Learning & Automation

Cybersecurity Analyst

Marine Corps Veteran that is passionate about cybersecurity transitioning to a more hands-on technical role.

el

408-

Hi

Ui

linke

a3a6

WORK EXPERIENCE

Technical Recruiter

Palo Alto Networks and Okta

01/2014 - Present

Achievements/Tasks

7 years cybersecurity industry experience. Over 20 years professional experience. Additional information available upon request.

EDUCATION

Cybersecurity

Arapahoe Community College

05/2020 - Present

4.0 GPA

San Jose State University

07/2001 - 12/2003

3.4 GPA

CERTIFICATES

CompTIA Security+

COMP001

CompTIA Network+

COMP001

Project Management Professional

PMP Number 131

PROJECTS

Hashcat Rig (04/2022 - 05/2022)

Converted one of my old Ethereum mining rigs into a Hashcat rig to perform dictionary, brute force, mask, and combinator attacks on password hashes.

OPNSense VMWare Lab (05/2022 - Present)

Created a VMWare lab for testing OPNSense virtual firewalls.

127@gmail.com

314

linked in

3

Cybersecurity Professional

An Innovative technical professional with over 10 years in the Brokerage/Financial industry. Seeking to pivot into another role in cybersecurity to support Risk Management.

WORK EXPERIENCE

Information Security Specialist

U.S. Bank

02/2021 - Present

Achievements/Tasks

Ensure IAM Quality Assurance by confirming access rights and approvals.  
Developed and Maintain procedures for systems access and quality assurance.  
Performed Weekly, Monthly and Quarterly IAM Reviews to ensure Risk Management Policies are followed.  
Assisted with onboarding and decommissioning web based applications.

WIM QA Analyst

Wells Fargo Advisors

04/2019 - 01/2021

Achievements/Tasks

Daily reviewed brokerage customer complaint program practices and resolutions.  
Followed FINRA Policy and Risk Management practices.  
Ensured complaint resolutions were documented and filed according to FINRA requirements.

Securities Operations Specialist

Wells Fargo Advisors

06/2012 - 04/2019

Achievements/Tasks

Resolved complex Brokerage account transactions.  
Provided coaching, training and feedback to new and existing staff.  
Acted as Subject Matter Expert for software testing and automation projects.

Technical Support Analyst

Connectria Hosting

09/2008 - 05/2012

Achievements/Tasks

Monitored managed hosting environment in a NOC(Network Operations Center).  
Added and removed users in Active Directory.  
Added and removed firewall rules for customer environments via Cisco ASDM.  
Escalated level 2 and 3 Network and Security Issues to on-call engineers.

EDUCATION

Telecom/Networking Essentials Certificate

Pace University

09/2013 - 09/2014

General Studies

High School

09/2001 - 05/2005

CERTIFICATES

CompTia Security+

(04/2022 - 04/2025)

Candidate ID#COMP001

FINRA Series 7 (General Securities Representative)

(10/2020 - Present)

NOTABLE PROJECTS

Processing Automation SME

(03/2018 - 04/2019)

Subject matter expert on automation project for brokerage transactions.  
Provided the documentation matrix to facilitate documentation requirements.  
The insight provided influenced executive management and application developers to update policy and procedures. This increased processing productivity and improved brokerage operations SLA KPI's.

SKILLS

IAM

Risk Management

Active Directory

Audit

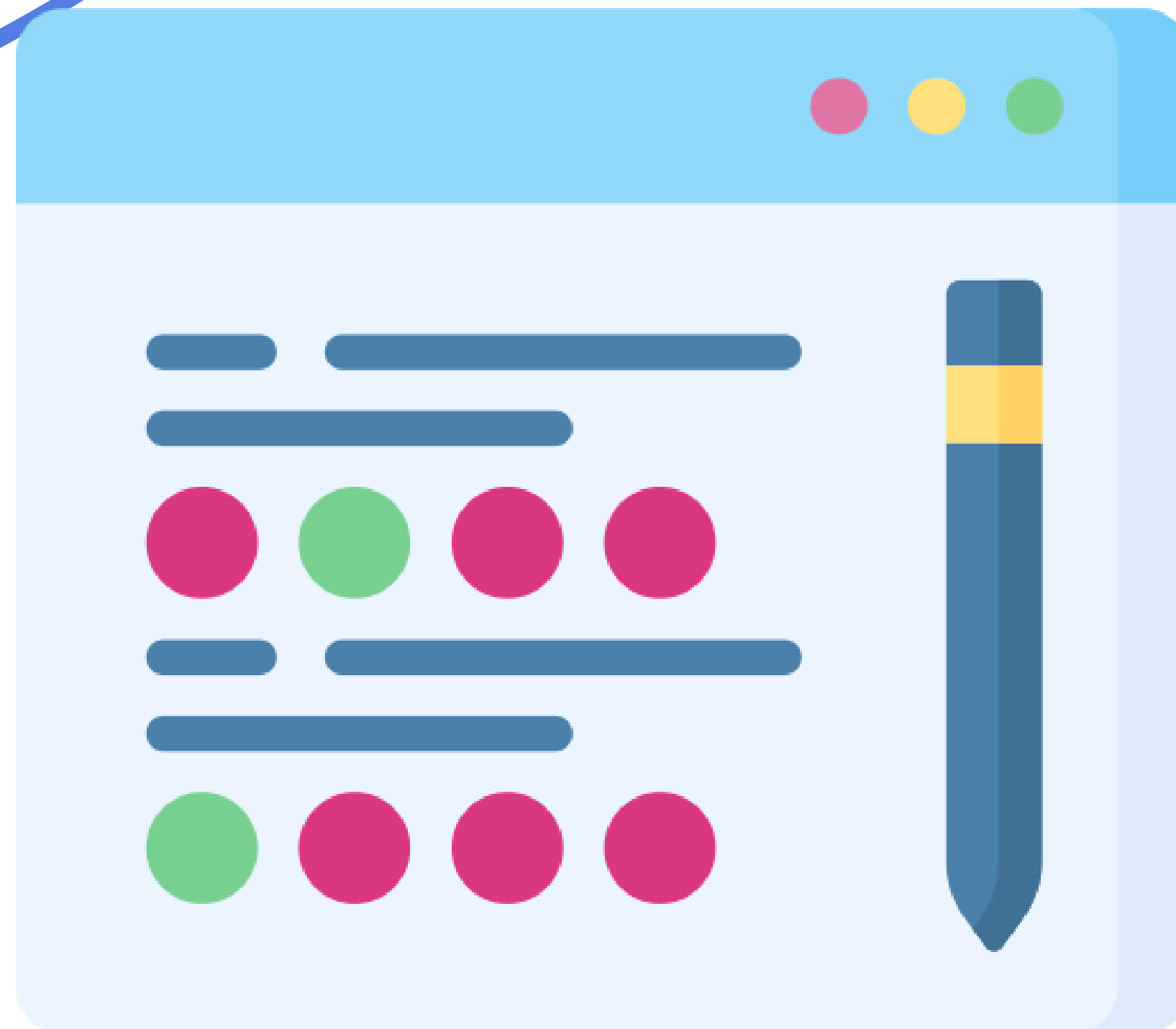
Windows Administration

Security Administration

Regulatory Compliance

Securities Regulation

# Psycho metrics are so hot right now



## PERSONALITY TEST

### Employee Personality Profile

The EPP is a personality assessment that measures twelve traits. Scores for each trait are expressed as a percentile ranking, which reflects how a person scored on that trait relative to other test-takers. There are no "high" or "low" scores on the EPP; rather, people with certain traits tend to be a better fit for certain jobs. The EPP contains a series of job families that assess how good a fit a person's personality is for a given position.

## Results Summary

No Job Family Selected

## Score Details



### Achievement



### Assertiveness



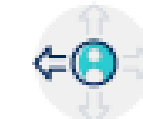
### Competitiveness



### Conscientiousness



### Cooperativeness



### Extroversion



### Managerial



### Motivation



### Openness



### Patience



### Self-Confidence



### Stress Tolerance



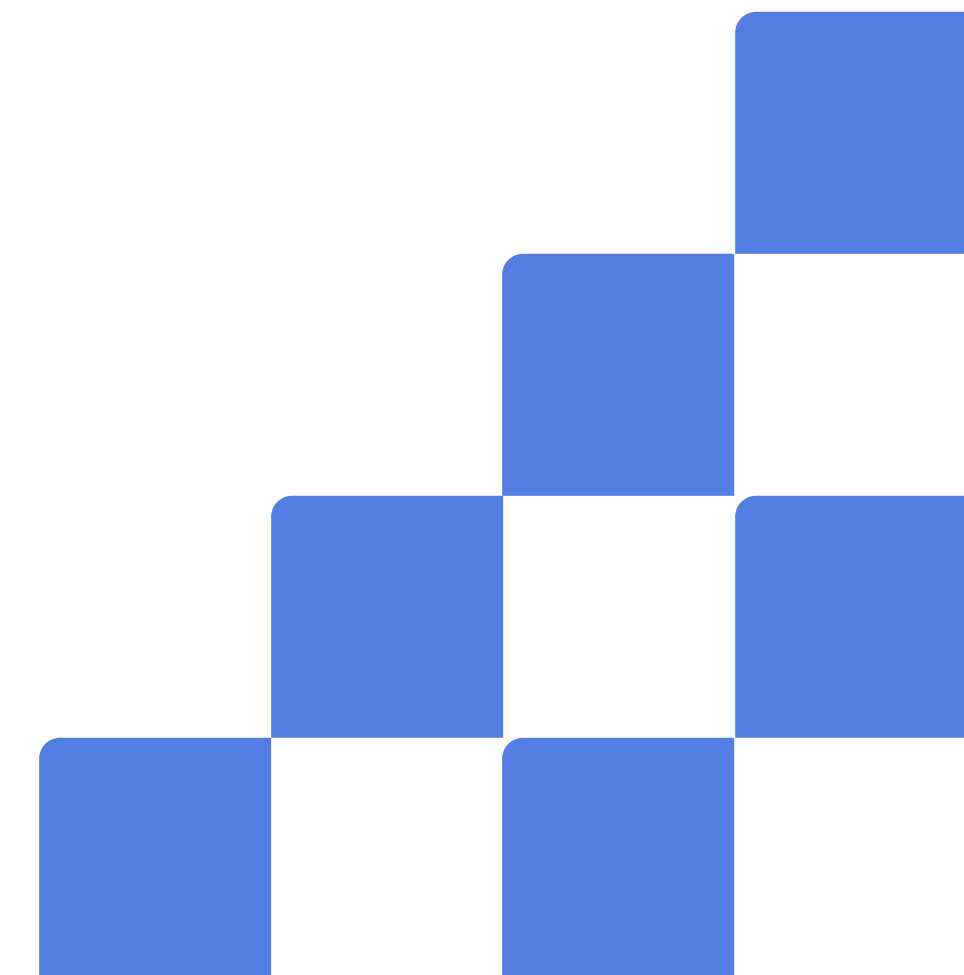




# Final Words

**Control what you can  
And let go of the rest**

While we cannot control the job market, company hiring timelines, or the preferences of recruiters, we can control our preparation, mindset, and approach.





Slides and Handouts available online at:

<https://github.com/black-tower/build-cyber-career>

# Thank you

## Keep a eye out

Building an entire cybersecurity program from zero to HERO over the next few years.

### Comprehensive Program

- Economically Viable
- Textbooks
- Videos
- Hands on Labs
- Tutoring & Mentorship