





OFFENSE FROM DEFENSE

My Rocky Path to the Dark Side

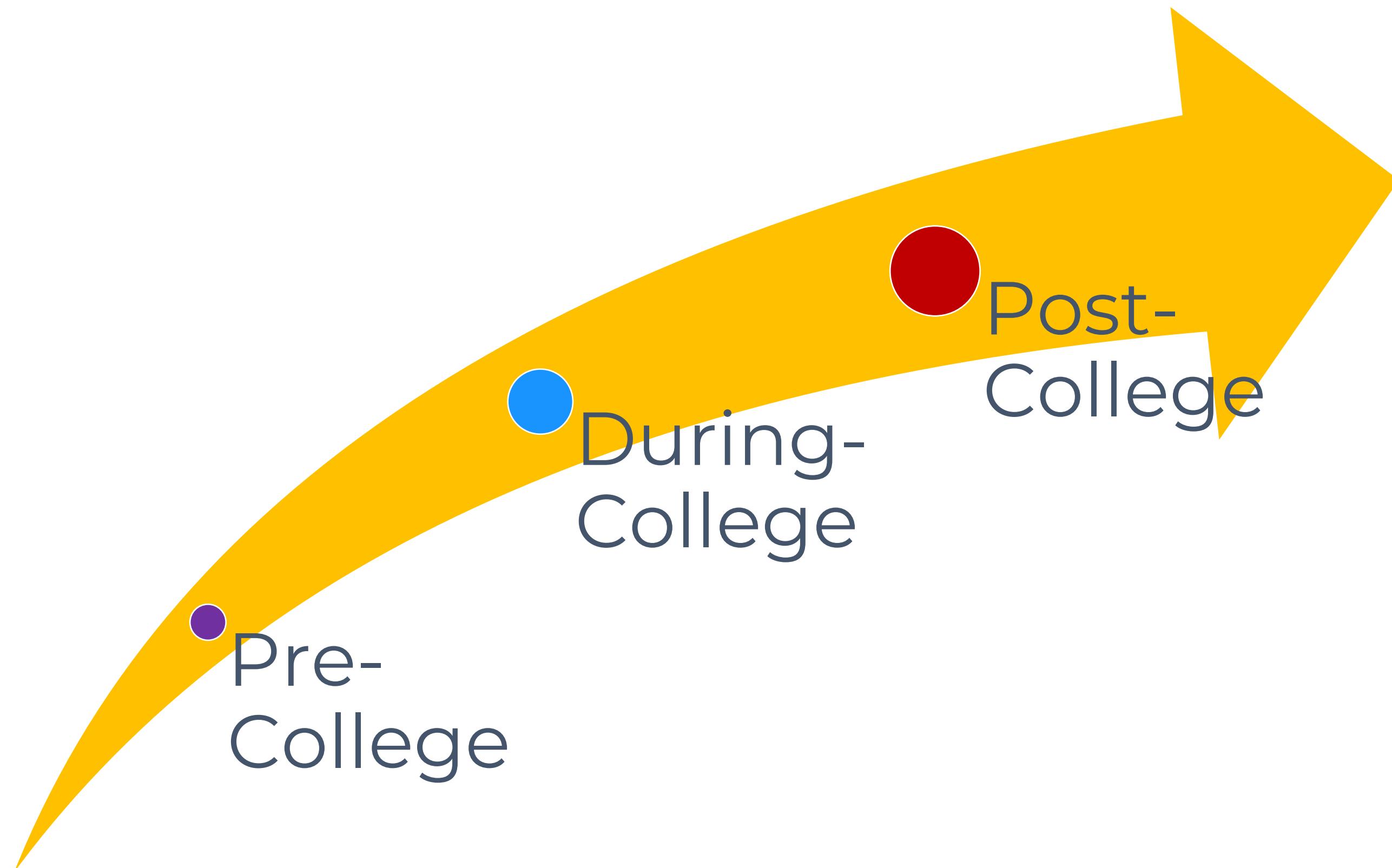




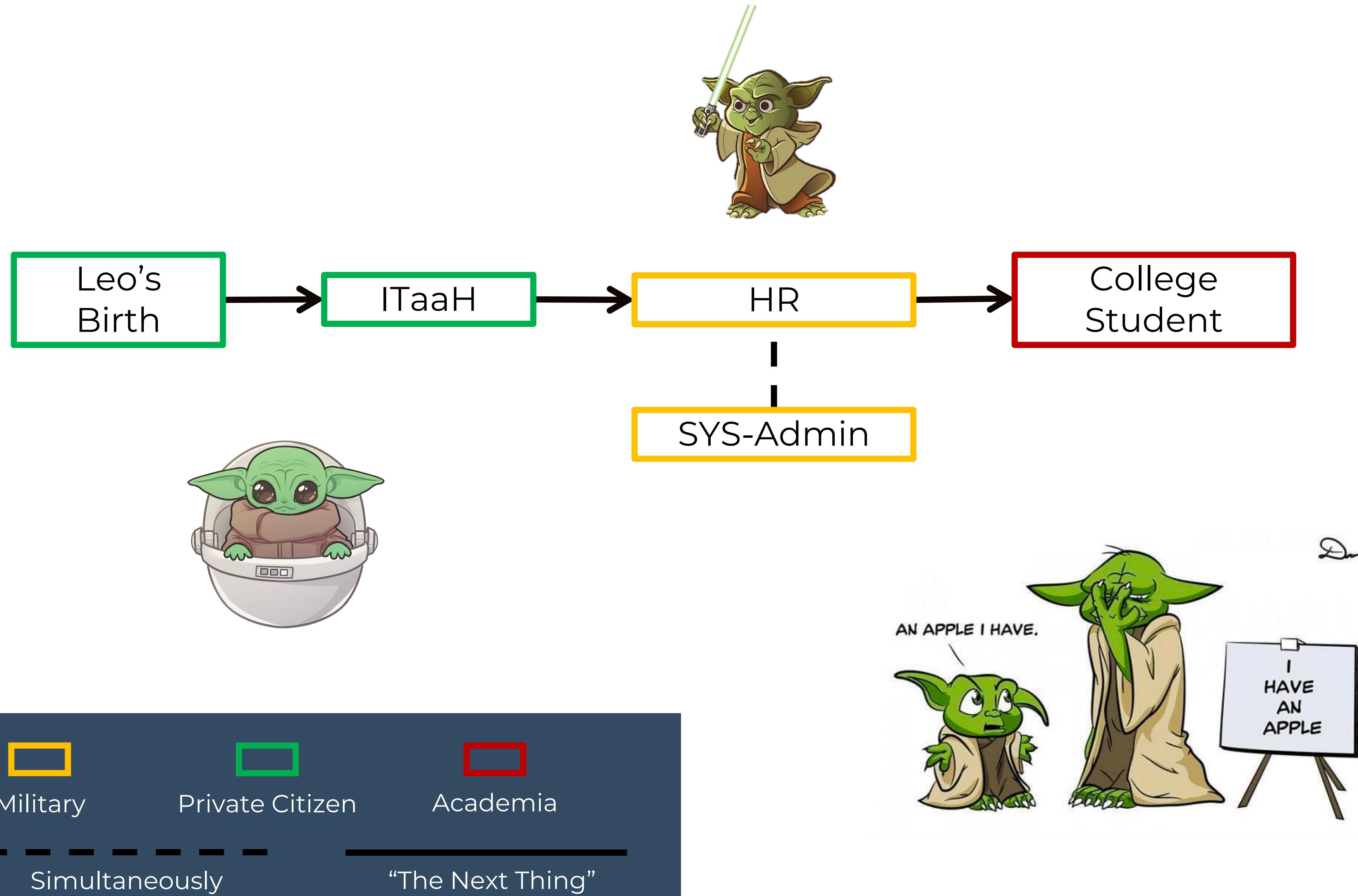
LEO PATE III

- Application Security Consultant - nVisium
- Former Cyber Warfare Officer - Army
- Technical Mentor - NodeCarolinias
- Code Monkey - Python, Go, Kotlin, JS, Java, etc.
- College of Charleston Grad - '16
- Builder of Legos
- Pursuer of the perfect Old Fashioned

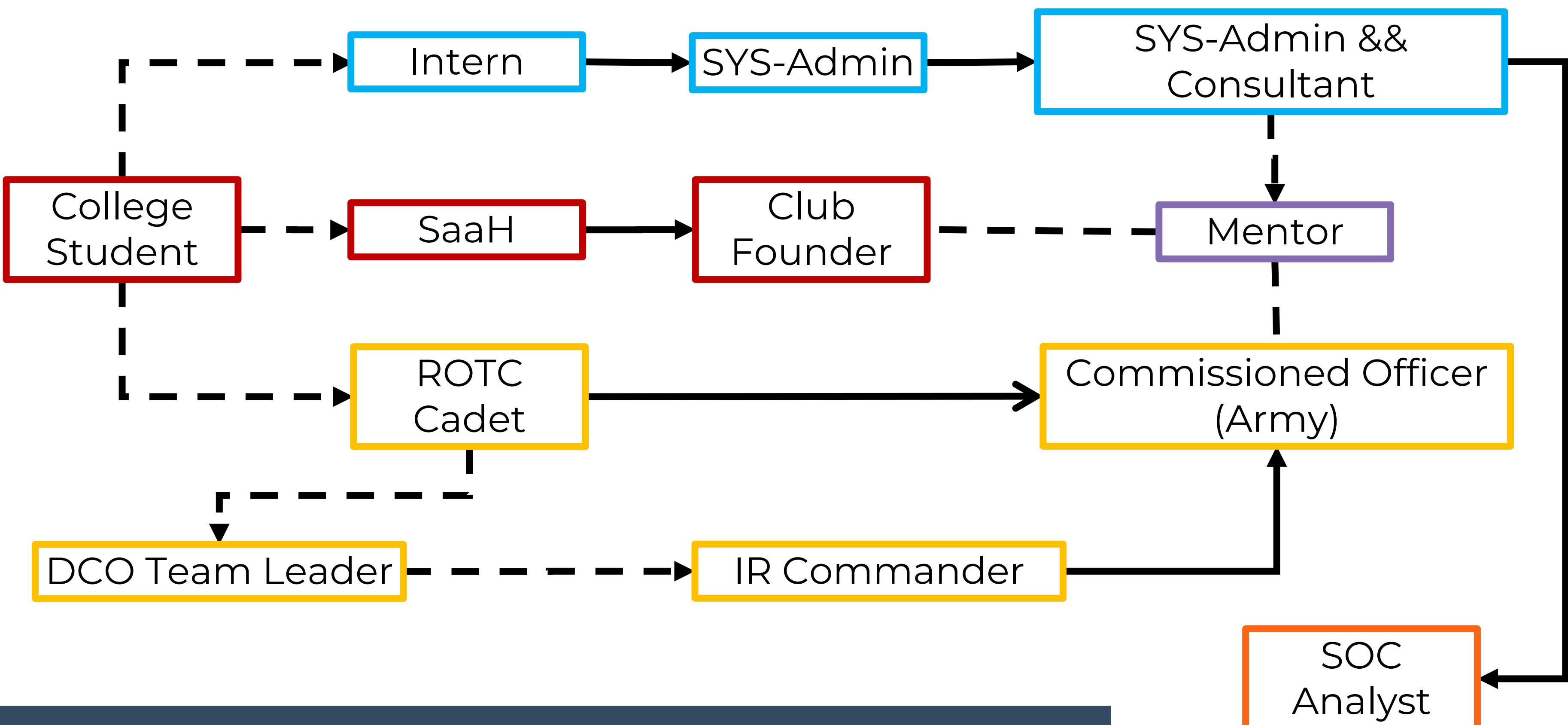
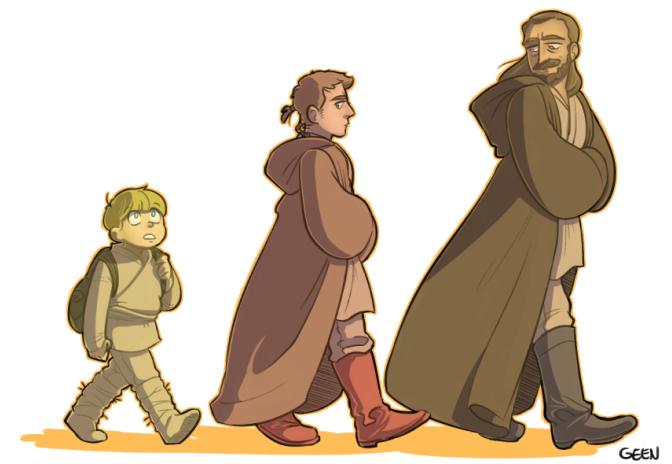
MY PATH DISECTED



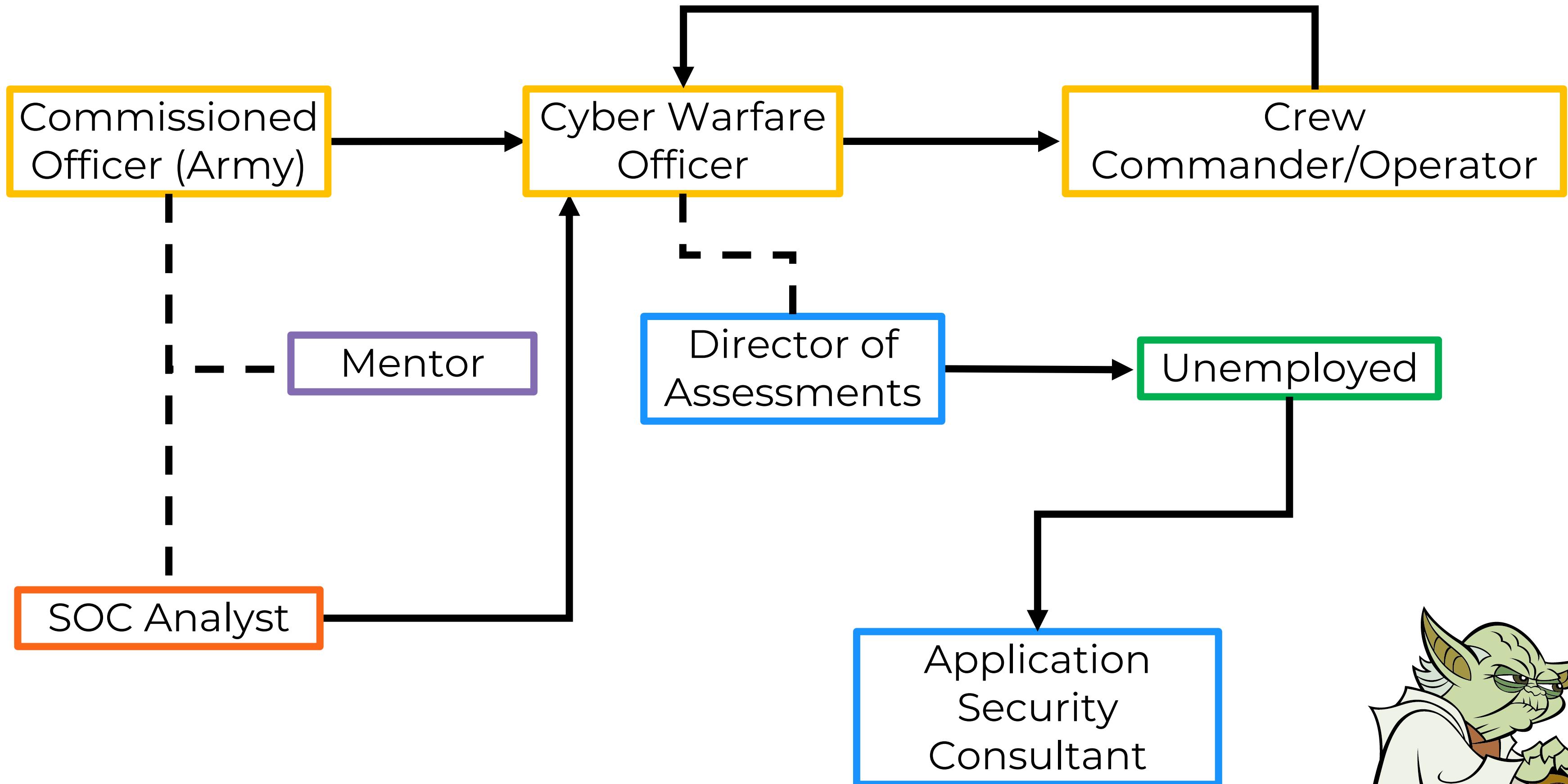
MY PATH (PRE-COLLEGE)



MY PATH (DURING-COLLEGE)



MY PATH (POST-COLLEGE)



UNEMPLOYED – NOT WHAT?

National level

TOTAL CYBERSECURITY JOB OPENINGS ⓘ

313,735



TOTAL EMPLOYED CYBERSECURITY WORKFORCE ⓘ

715,715



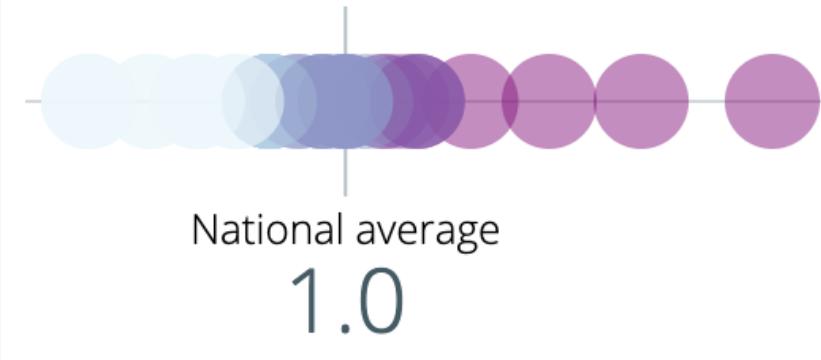
SUPPLY OF CYBERSECURITY WORKERS ⓘ

Very Low
CYBERSECURITY WORKFORCE
SUPPLY/DEMAND RATIO



GEOGRAPHIC CONCENTRATION ⓘ

Average
LOCATION QUOTIENT



TOP CYBERSECURITY JOB TITLES ⓘ

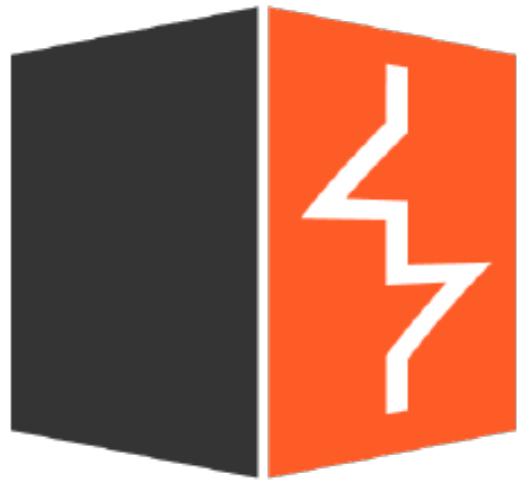
- Cyber Security Engineer
- Cyber Security Analyst
- Network Engineer / Architect
- Cyber Security Manager / Administrator
- Systems Engineer
- Software Developer / Engineer
- Systems Administrator
- Vulnerability Analyst / Penetration Tester
- Cyber Security Consultant

June 2019 - cyberseek.org

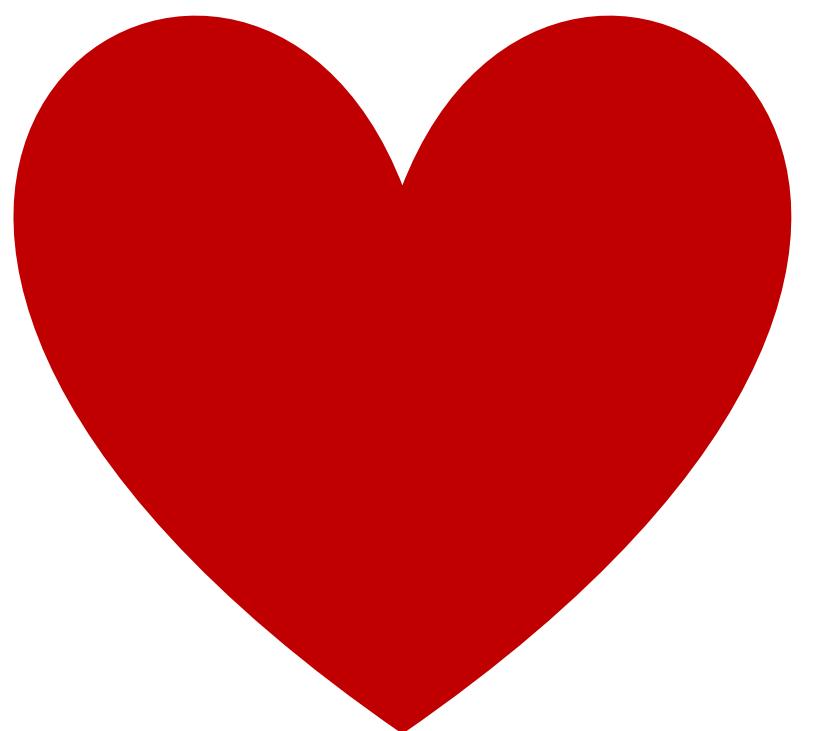
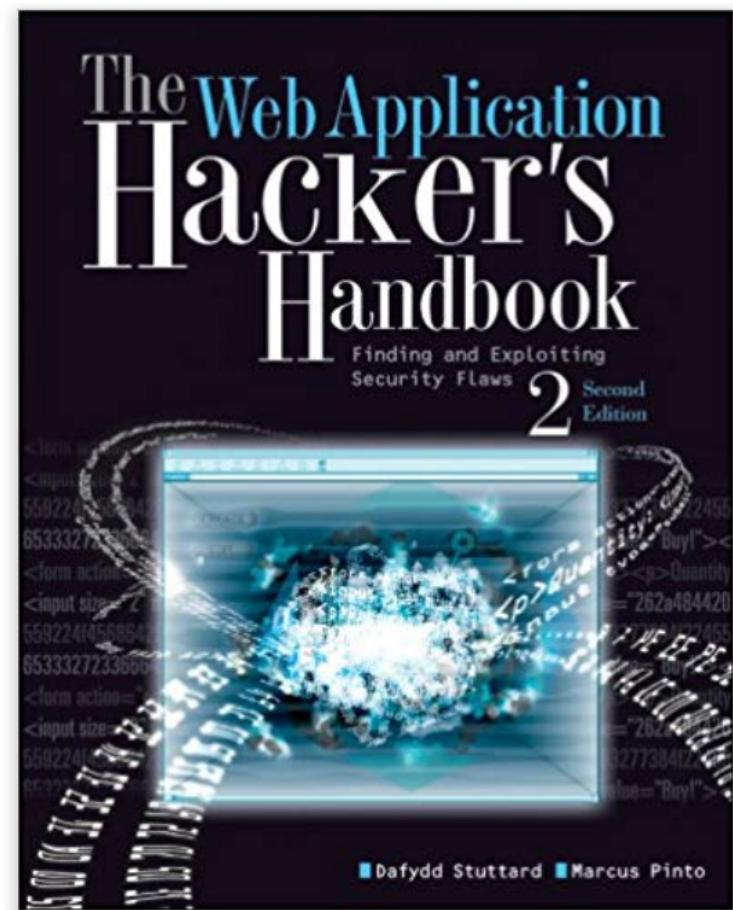
LEARN. EVERYTHING.



METHOD TO THE MADNESS



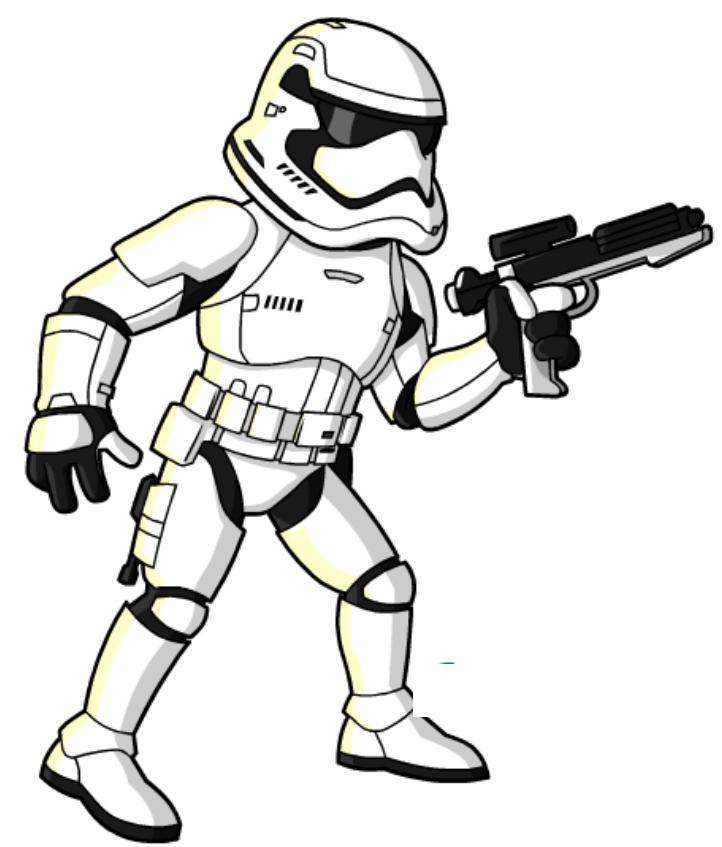
WEB SECURITY
ACADEMY



ARGH.....Y U NO CALL BACK?

Company	Job Position	Location	Date Applied
[REDACTED]	Security Engineer II - Red Team	Seattle, WA	6/30/2019
[REDACTED]	Head of Penetration Testing	Seattle, WA	6/30/2019
[REDACTED]	Penetration Testing Manager	Seattle, WA	6/30/2019
[REDACTED]	Security Engineer II - Pen Test	Seattle, WA	6/30/2019
[REDACTED]	Security Engineer II - Bug Bounties	Seattle, WA	6/30/2019
[REDACTED]	Security Engineer, Forensics and Malware	Seattle, WA	6/30/2019
[REDACTED]	Security Engineer	Seattle, WA	6/30/2019
[REDACTED]	Project Manager, Information Security	Seattle, WA	6/30/2019
[REDACTED]	Operator/Hunter (Continuous Penetration Testing)	Remote	7/25/2019
[REDACTED]	Threat Intel Advisor	Remote	7/1/2019
[REDACTED]	Sr. Incident Response Consultant	Remote	7/1/2019
[REDACTED]	Sr. Consultant	Remote	7/1/2019
[REDACTED]	Sr. InfoSec Engineer	Seattle, WA	8/22/2019
[REDACTED]	Privacy Engineer	Seattle, WA	8/22/2019
[REDACTED]	Manager - Security Engineering	Seattle, WA	8/22/2019
[REDACTED]	Manager of Security Operations	Seattle, WA	8/22/2019
[REDACTED]	ISSM	Seattle, WA	8/22/2019
[REDACTED]	Sr Cyber Advisor	Seattle, WA	8/22/2019
[REDACTED]	SIEM Security Systems Engineer	Seattle, WA	8/22/2019
[REDACTED]	Senior Detection & Response Engineer	Remote	8/29/2019
[REDACTED]	Security Engineer, Incident Manager	Seattle, WA	8/29/2019
[REDACTED]	Threat Response Manager	Seattle, WA	8/29/2019
[REDACTED]	Threat Hunter/ICS Analyst	Seattle, WA	8/29/2019

MY SAVING GRACE



MY DAY OF JUBILEE



nVISIONUM

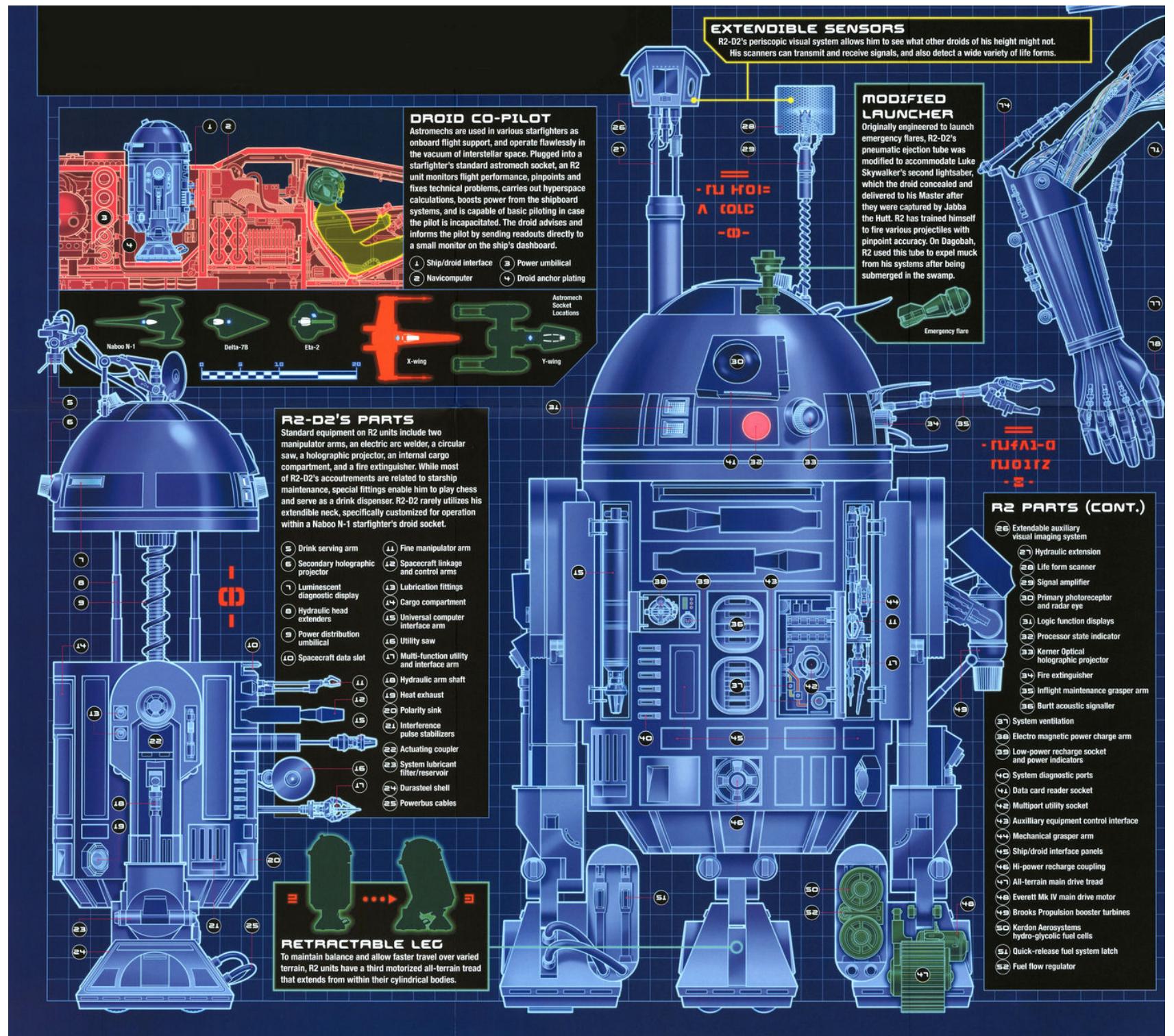
LEARN THE BASICS

› **NETWORKING**

› **CODING**

› **WINDOWS**

› **LINUX**



FIND YOUR “THING”

- DO YOU LIKE BUILDING THINGS?
- DO YOU LIKE FIGURING OUT HOW THINGS WORK?
- DO YOU LIKE TO BREAK THINGS?
- DO YOU LIKE TO FIX BROKEN THINGS?

FIND A MENTOR

- ⟩ **TWITTER**
- ⟩ **COLD E-MAILS**
- ⟩ **MEETUPS**
- ⟩ **CONFERENCES**
- ⟩ **SLACK GROUPS**



FIND A MENTOR

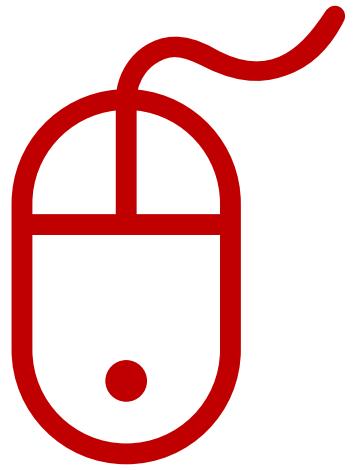
- ⟩ **PLAY WITH NEW TECHNOLOGY**
- ⟩ **NEVER UNDERESTIMATE A VM/CONTAINER**
- ⟩ **CHECK ONLINE FOR TUTORIALS (DIGITAL OCEAN)**
- ⟩ **LOOK ON GITHUB FOR OPEN SOURCE PROJECTS AND CONTRIBUTE**

SECRET SAUCE TO GETTING A JOB IN INFOSEC

- ❯ TALK TO EVERYONE; DON'T BE AFRAID TO APPROACH PEOPLE
- ❯ GET INVOLVED IN LOCAL COMMUNITY INFOSEC
- ❯ BUILD A WEBSITE AND HOST A BLOG
******GREAT PROJECT!!***
- ❯ BE FLUENT IN THE FUNDAMENTALS
KNOWLEDGE > CERTS
- ❯ DO STUFF! CTFs, COMPETITIONS, TECH PROJECTS (PERSONAL AND PART OF A TEAM), ETC.
- ❯ CREATE YOUR OWN BRAND



QUESTIONS?



Reach Out!



TWITTER

@ltpate3



E-MAIL

leo@leop3.io

RESOURCES

- <https://www.cyberseek.org/heatmap.html>
 - Detailed and up-to-date info information about information security job market
- <https://portswigger.net/web-security>
 - PortSwigger Web-Academy – used to learn web application security
- <https://attack.mitre.org/matrices/enterprise/>
 - MITRE ATT&CK Matrices – great for learning tactics, techniques, and procedures of known malicious groups
- <https://cwe.mitre.org/data/definitions/1026.html>
 - OWASP Top 10 Entries mapped to current Common Weakness Enumeration (CWE) entries – great for learning types of weaknesses in a number of areas
- <https://capec.mitre.org/data/definitions/3000.html>
 - Common Attack Pattern Enumeration and Classification (CAPEC) – great for learning tactics, and techniques in offensive security
- <https://www.vulnhub.com/>
 - Vulnerable by design VMs that act as self-hosted CTFs; great for honing your skills
- <https://cheatsheetseries.owasp.org/>
 - OWASP Cheat Sheets – Great bullet points for a lot of different application security topics

RESOURCES

- <https://owasp.org/www-project-top-ten/>
 - OWASP Top 10 List – great starting point to know when learning/conducting application security testing