PRO-CERTS, DEGREES, BOOTCAMPS, & LOW COST/FREE STUFF: BREAKING INTO CYBERSECURITY CAN BE ____ (INSERT ADJECTIVE)

BE Rhodes

Head of Cybersecurity, zvelo

LTC, Cyber Warfare, Colorado Army National Guard

OUTLINE

- WHOIS: Brad Rhodes
- Important questions (about yourself)
- Cybersecurity Fields
- Degrees
- Bootcamps
- Professional Certifications
- Free Training
- Low Cost Training
- How to get experience
- Networking, Networking, Networking

WHOIS: BRAD RHODES

- **TLDR:**

  - ✔ Head of Cybersecurity at zvelo

  - ✔ LTC, Cyber (17A) Colorado Army National Guard & Cyber Shield OIC

  - ✔ Military Cyber Professionals Association, HammerCon Co-Lead

  - ✔ Speaker, Author, Professor, Coach

  - ✔ #toomany Pro-Certs, highlights: CISSP-ISSEP, CISM, PMP, CEH, GMON, GCIH, RHCSA, CCNA Cyber Ops, CySA+

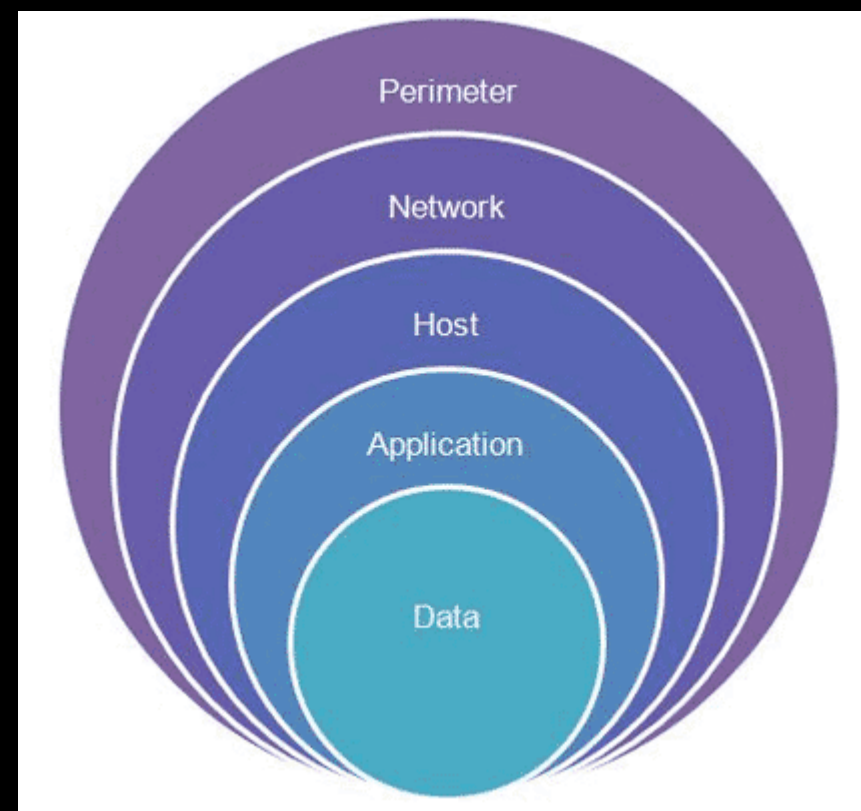Recent Podcast Appearance (Colorado = Security, Episode 159):
https://www.colorado-security.com/podcast

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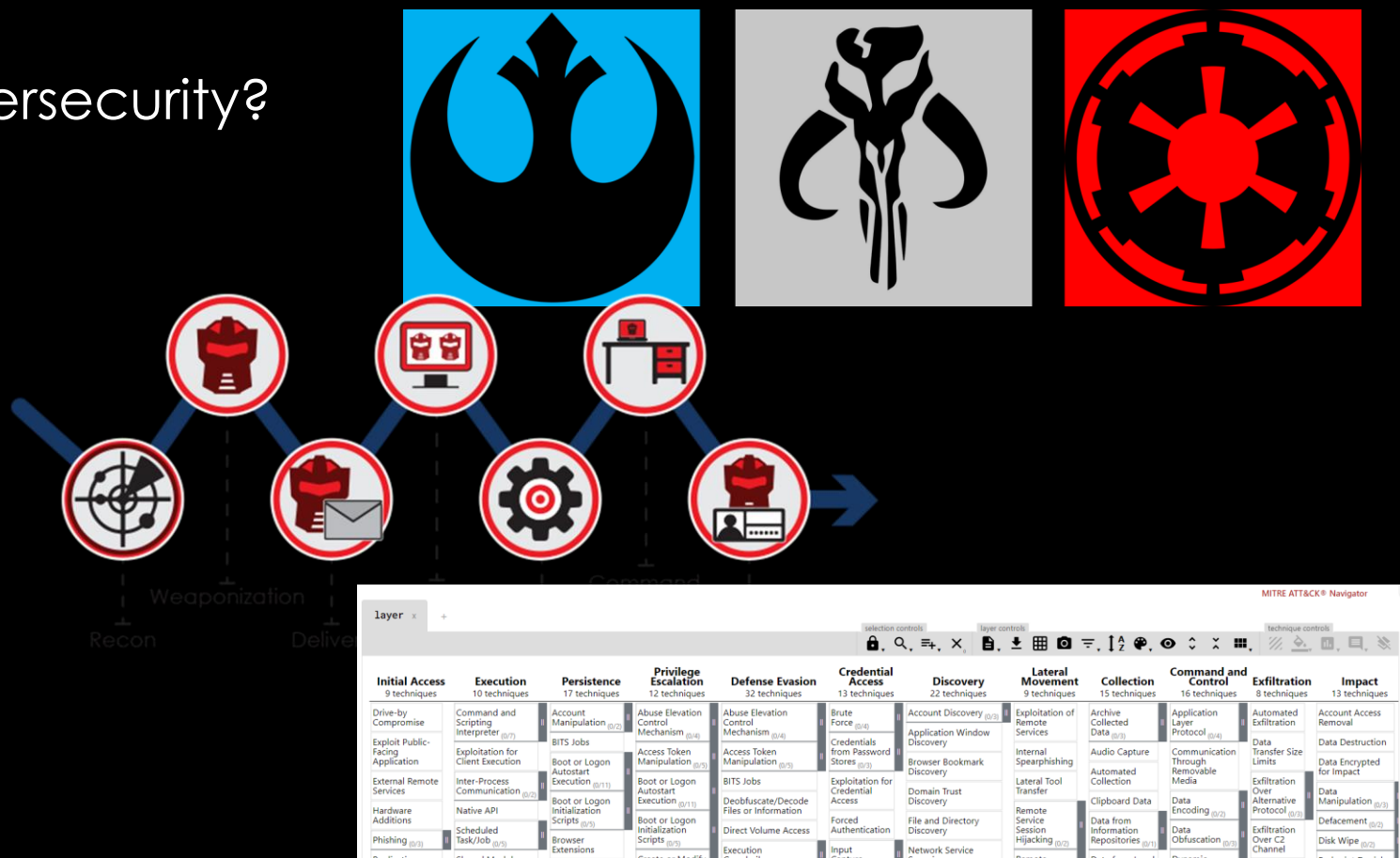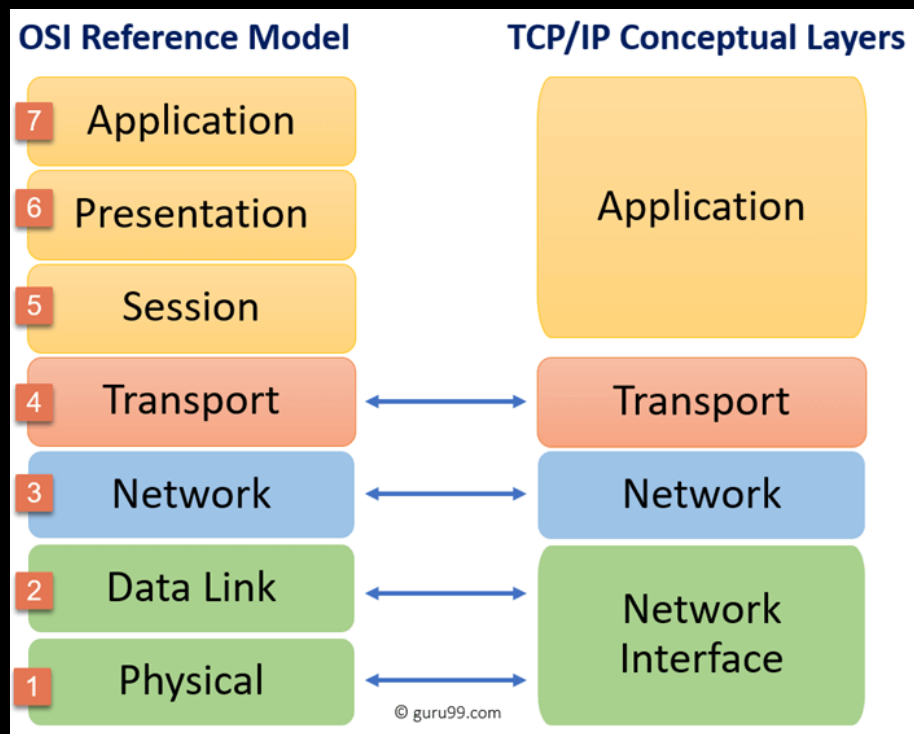
IMPORTANT QUESTIONS

- What SKILLS are needed in cybersecurity?
  - Planning, Networking, Scripting, Operating Systems, Databases, Cloud, RF (Radio Frequency), Big Data, and many more…
- What are the standards in cybersecurity?
  - NIST (https://www.nist.gov/topics/cybersecurity)
  - ISO (https://www.iso.org/home.html)
  - CIS (https://www.cisecurity.org/)
  - IEEE (https://www.ieee.org/)
  - CMMC (https://www.acq.osd.mil/cmmc/)
  - Laws and regs… for example HIPPA, SOX, GLBA, GDPR, etc

IMPORTANT QUESTIONS

- What are the models in cybersecurity?

IMPORTANT QUESTIONS

What do YOU want to DO?

The bigger the challenge

The bigger the opportunity

Brad's Opinion

IMPORTANT QUESTIONS

Diversity of thought is CRITICAL to cybersecurity!

https://public.milcyber.org/activities/magazine/articles/2020/houston-the-next-cyber-whiz-kid-might-be-an-english-major

CYBERSECURITY FIELDS

General Skills

Focused

Specialized

Journeyman
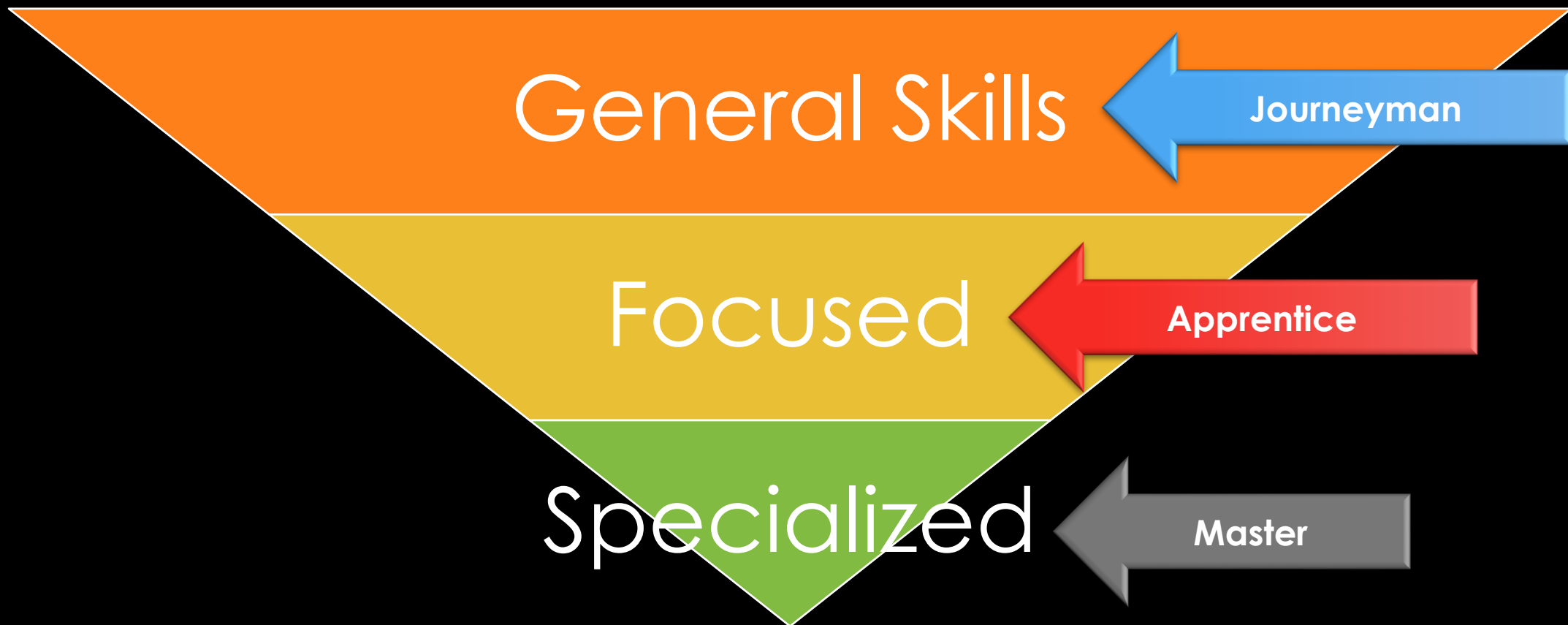
Apprentice

Master

CYBERSECURITY FIELDS

Fields	On "Keyboard"?	Level(s)
Leadership & Policy	Sometimes	Master
Forensics	Yes	Apprentice-Master
Incident Response	Yes	Apprentice-Journeyman
Pentesting	Yes	Journeyman-Master
Malware Reverse Engineer	Yes	Journeyman-Master
Big Data & Analysis	Sometimes	Apprentice-Journeyman
Cyber Threat Intelligence	Sometimes	Apprentice-Master
Auditing	Sometimes	Journeyman-Master
Analysts	Sometimes	Apprentice-Master
Architects	Sometimes	Journeyman-Master
Trainers/Educators	Sometimes	Journeyman-Master

DEGREES

- Do you have a Bachelor's Degree?
  - Get a Professional Certification or Two
- Do you have a Master's Degree?
  - Get a Professional Certification or Two
- Do you not have any Degree?
  - Get a Professional Certification or Two

If you choose to get a Degree, be sure it is from a Regionally Accredited Institution and preferably an **NSA Center of Academic Excellence in Cyber Operations** (https://www.nsa.gov/resources/students-educators/centers-academic-excellence/cae-co-centers/)

BOOTCAMPS

- Two Types:
  - Short (1-2 weeks)
  - Long (4-6 months)
- Things you might hear:
  - "Become a cybersecurity professional in just 24 weeks!"
  - "Guaranteed job placement!"
  - "Money Back Guarantee"

Brad's Opinion: Beware Romulans Bearing Gifts!

PROFESSIONAL CERTIFICATIONS

Legend:
(A)= Advanced
(B) = Beginner
(I) = Intermediate

PROFESSIONAL CERTIFICATIONS

- Management-focused:
  - CISSP (A)
  - CISM (I)
  - CASP (I)
  - PMP (I)
  - ITIL (I)
  - CCISO (I)

- Knowledge-based:
  - Security+ (I)
  - A+ (B)
  - Network+ (B)
  - Linux+ (I)
  - Cloud+ (I)
  - CEH (I)
  - CySA+ (I)
  - Google IT Cert (B)

- Hands On:
  - RHCSA (I)
  - OCSP (A)
  - CCNA (I)
  - CEH (Master) (I)

- Hybrids:
  - Anything GIAC (B, I, A)
  - PenTest+ (I)

Brad's TIP: BOLO for Beta exams!

Brad's Opinion

PROFESSIONAL CERTIFICATIONS

Demonstrate your ability to learn and retain information!

Do NOT guarantee you a job, but *can* get you in the door!

Are NOT equivalent to experience!

Brad's TIP: Once you get a pro-cert, you have to maintain it (CPEs & $$$)!

FREE TRAINING

- Splunk: https://workplus.splunk.com/veterans
- Palo Alto: https://live.paloaltonetworks.com/t5/second-watch/ct-p/Veterans_Network
- Cisco (via Institute for Veterans and Military Families at Syracuse University): https://blogs.cisco.com/csr/cisco-offers-military-veterans-free-cybersecurity-training
- IVMF (different tracks): https://ivmf.syracuse.edu/programs/career-training/
- PMP Pro Learn: https://www.pm-prolearn.com/visitor_class_catalog
- YouTube (example – Python Zero to Hero: https://www.youtube.com/watch?v=eHxoh9Rrtdk
- FedVTE: https://fedvte.usalearning.gov/

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LOW COST TRAINING

- Cybrary
- Coursera
  - https://grow.google/programs/it-support/
- Udemy
- ITProTV
  - Discount for Veterans!
- **Buy a book & self-study!**
- **Build some Virtual Machines (VM)!**
- **Buy a RaspberryPi!**

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HOW TO GET EXPERIENCE

- Volunteer!
  - Cyberpatriot (https://www.uscyberpatriot.org/)
  - National Collegiate Cyber Defense Competition (CCDC) & Regional (https://www.nationalccdc.org/)
  - **National/Regional/Local Tabletop Exercises**
  - Professional Organization Local Chapters

- Capture the Flags
  - SANS Holiday Hack (https://www.holidayhackchallenge.com/past-challenges/)
  - Over-the-Wire (https://overthewire.org/wargames/bandit/)
  - Hack-the-Box (https://www.hackthebox.eu/)

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NETWORKING, NETWORKING, NETWORKING

- LinkedIn! Please be OPSEC savvy!
  - I'm happy to connect with you: https://www.linkedin.com/in/brad-rhodes-1951ba7/
- Professional Organizations
  - National & Local Chapters
- Meetup(s) (https://www.meetup.com/)
- Job Fairs – have your resume handy/ready (virtual or in-person)
- Have business card to hand out (when we go back to meeting in person)!
- Find and follow **Blogs** like **Jax Scott**'s: https://beansandbytesblog.com/5-steps-to-a-cybersecurity-career/

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THE *REAL* SECRETS!

- You – as a Veteran – already have **valuable skills**
- You need to be a **life-long learner**
- You need to know how to **research**
- You need to have some **writing** chops
- You are **NEEDED** in cybersecurity!!

SUMMARY

- **Pro Certs, Degrees, Bootcamps, & Low Cost/Free Stuff: Breaking into Cybersecurity can be ____ (insert adjective)**
  - **Exciting**
  - **Amazing**
  - **Fun**
  - **Productive**
  - **Scary**
  - **Rewarding**
  - **The best career choice you'll make!!**
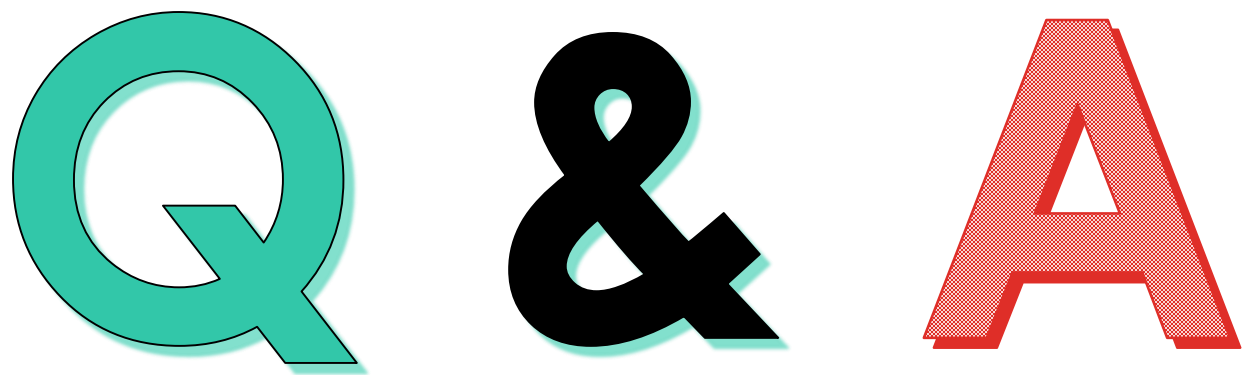
THANK YOU VETSECCON!!

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Presentation on Github: https://github.com/cyberguy514/presentations

Q & A

QUESTIONS???