

### ~WHO @M I~

- Lead CyberSecurity Instructor Flatiron School
- CyberPreserve- Founder
- Lead at InfosecGirls, NYC Chapter
- OWASP WIA, Member



#### WHAT IS CYBERSECURITY?



- Wikipedia says: It is the protection of computer systems and networks from the theft of or damage to their hardware, software, or electronic data, as well as from the disruption or misdirection of the services they provide.
- What I say It is securing data in all forms by multiple implementations say it by Encryption, Following audit & compliance, Secure Coding, Reverse Engineering, Single Sign On (SSO), Identity Management, Monitoring Data in form of logs etc...

# IT'S ALL ABOUT — CIA (CONFIDENTIALITY, INTEGRITY, AVAILABILITY)



- Confidentiality access to information should be restricted to only those who need access to it.
- Integrity assurance that information is accurate, and reliable – in other words, protected from unauthorized modification, destruction, and loss.
- Availability guarantee of access to information by authorized persons as and when necessary.



## CYBERSECURITY AND IT'S GROWING DEMAND

- CyberSecurity as a career has grown in demand in the last 10 years.
- Today, every organization has an in-house CyberSecurity Team.
- There is a growing demand among professionals to pursue CyberSecurity as a profession.
- There is a huge gap between number of employed
  CyberSecurity professionals and the number of vacancies.
- There is a shortage of nearly <u>5 million</u> CyberSecurity professionals throughout the world.

# HOW CYBERSECURITY IS AN EXTENSION OF EXISTING PROFESSIONS?

#### So, how to relate your current profession to different domains in CyberSecurity?

- Explore different domains in CyberSecurity. (reading articles/tutorials, attending Cyber Communities Webinar/Podcasts/Sessions, watching videos)
- Once you gain a basic understanding of different domains, assess your current job functioning.
- Which area did you find close to your current profession/job?
  - For example: If you are working in software testing, do you find relatable to Pentesting in Application Security?
  - If you are working in a Pharma Company > you must we abiding by certain healthcare security standards like those of HIPAA or some other security standards & compliance. Do you find Risk and Audit as a relatable domain?

The key focus is — CyberSecurity is an extension of our day to day jobs; we are securing data in all forms.

## AFTER SELECTING A DOMAIN — NEXT STEPS TO LAND A JOB

- Once you have identified a relatable domain:
  - Join CyberSecurity Non-Profit Communities as members or volunteers. (OWASP, Wicys, ISACA, IS2, WoSec, InfoSecGirls and many others)
  - Choose a mentor in the same domain and work under their guidance in order proceed in the right direction.
  - Enroll for free or low fee foundational courses.
  - Once you have gained a basic knowledge of a domain, start applying for jobs and interview to learn the interviews expectations.
  - Learn from each rejection and apply lessons in your learning.
  - Practice and consistency is the key

### CYBERSECURITY – FREE LEARNING RESOURCES

- https://owasp.org/www-project-top-ten/
- <a href="https://www.sans.org/top25-software-errors">https://www.sans.org/top25-software-errors</a>
- <a href="https://www.iso.org/standards.html">https://www.iso.org/standards.html</a>
- https://network-tools.com/
- https://linuxhint.com/list essential linux security commands/

#### **SOME OPEN SOURCE TOOLS**

- Nmap- <a href="https://nmap.org/">https://nmap.org/</a>
- Wireshark- <a href="https://www.wireshark.org/">https://www.wireshark.org/</a>
- Burpsuite- <a href="https://portswigger.net/burp">https://portswigger.net/burp</a>
- OpenVAS- <a href="https://www.openvas.org/">https://www.openvas.org/</a>
- OWASP ZAP Tool- <a href="https://www.zaproxy.org/download/">https://www.zaproxy.org/download/</a>
- SQLMap-<a href="http://sqlmap.org/">http://sqlmap.org/</a>

### REACH OUT TO ME!



#### Thanks for attending this session.

You can reach out to me at:

- Email: <u>aastha.cyberpreserve@gmail.com</u>
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