

Careers in Cybersecurity

Certs, Career Tracks, and Opportunities

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Who is this presentation for?

- Those looking for careers in Cybersecurity
- Anyone doing *ANYTHING* in CS/CE
- Lifelong learners
 - ◆ As we all should be

Why is this important?

- Protecting individual and company data
- That's it really.

We need to prove to companies that we can protect them.

Cybersecurity in IT

What Does an IT Security Professional Do?

- Ensure clients are HIPAA compliant.
- Generate false phishing emails to ensure that employees can detect scams.
- Provide users with an architecture conducive to frequent backups and restores.
- Defend against external network attacks
- Protect client organizations from disgruntled employees

HIPAA Compliance

- The HIPAA Security Rule
- Client healthcare data must be kept private and only distributed to authorized parties
- The Office of the National Coordinator for Health Information Technology has a tool for checking HIPAA compliance per system
 - ◆ A very generalized tool that can fail in complex architectures

Teach a Man to Phish

- Copy email templates from large companies.
- Embed dangerous links in stylized elements.
- If masquerading as an individual, speak with authority.



John Wright

to ogc ▾

3:10 PM (0 minutes ago)



Good afternoon,

I'm performing a survey regarding median student ages in universities in the state of Florida. More and more students are going to college under the age of 18 each year, and my study aims to see how that is impacting the age diversity of college campuses. I would like to make a public information request for Florida Polytechnic University student birth date information, as well as the students location of birth, in order to understand more about the background of students who are under 18.

Please let me know ASAP how I can go about obtaining this information.

Regards,

John Wright

The Importance of Backups

- Ransomware, client mistakes, aggressive malware.
- Evidence in case of legal action

Build a Secure Network

- Properly using DMZs for external facing systems
 - ◆ Web/mail/FTP servers
- Effectively using firewalls to protect internal networks

What to do When the Angry Guy Gets Fired

- Disgruntled employees pose far less danger when employed, but termination can trigger a hostile reaction
- Companies immediately revoke domain access on termination, but what if the employee sees their termination on the horizon?
- Keyloggers and screen monitors can be used to ensure employees take no hostile action prior to termination.

Cybersecurity Career Tracks

7 Hottest Cybersecurity Jobs for 2018

Ranking	Title	Pay	Growth Rate	Experience Required	Coolness	Career Options	Total Score
7	IT Security Auditors	3	4	3	4	4	18
6	Network Security Admins	3	3	5	3	4	18
5	Information Security Analysts	4	5	4	4	4	21
4	Information Security Specialists	4	5	5	4	4	22
3	Information Assurance Engineers	5	5	5	4	4	23
2	Cybersecurity Consultants	5	5	4	5	5	24
1	Information Security Managers	5	5	5	5	5	25

Cyberseek: Finding Career Tracks



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

Certifications



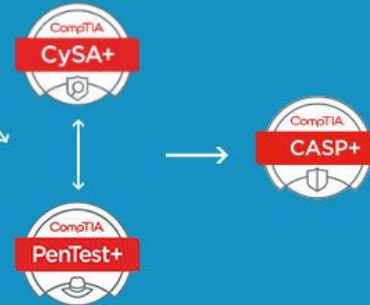
Infrastructure Pathway



Additional Certifications



Cybersecurity Pathway



Starter Certifications

- CCNA, CCNP
- JNCIA, JNCIP
- Network +
- Security +



CISSP: The Golden Cert

Certified Information Systems
Security Professional:

- 5 years of work experience
- Knowledge/experience in specific domains
- Can substitute a Bachelor's or other security cert for a year of experience

Let's Talk \$\$\$

Resources



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