Cybersecurity Starter Pack Navigating Your Career in Cybersecurity



Katie Knowles Manager - Threat Response, PwC















And this...?



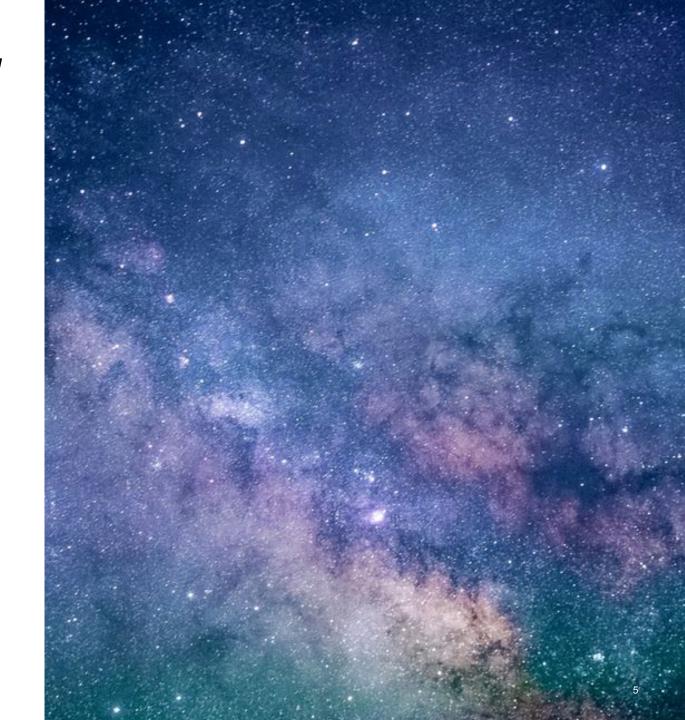
"If you know the enemy and know yourself you need not fear the results of a hundred battles."

-Sun Tzu

PwC

Different Roles in Security

- There's more to cybersecurity than the stereotypes we think about.
- Roles can include...
 - Security Operations & Incident Response
 - Penetration Testing & Red Teaming
 - Security Engineering
 - Security Auditing
 - Security Governance, Risk, & Compliance
 - CISO & Security Management
 - The list goes on!
- New work is always emerging through trends like cloud security or new compliance requirements.
- All require knowledge of security, but not all to the same depth or in the same areas.



Where to Start?

- 1. What do *you* want?
- 2. Roles: What's out there?
- 3. Direction: What's your focus?
- 4. Challenges: How to solve problems.
- 5. Professionality: Rock your role!



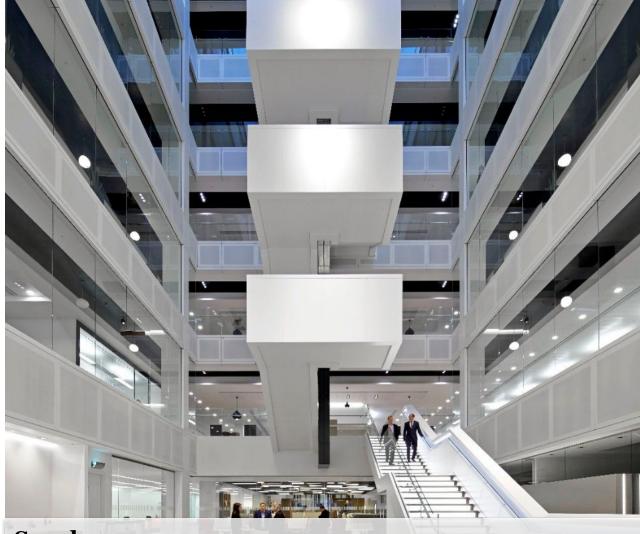
About Us

PricewaterhouseCoopers (PwC) Cyber Team

- Internal Firm Services (IFS)
- Manages internal cybersecurity for PwC's global network of firms
- Threat Response, Threat Intelligence, Vulnerability Management, Product, & many other teams!
- Support of **284,000**+ users

Threat Response

- 24x7 Incident Response
- Threat Hunting
- Detection Engineering
- Process Improvements
- Team trainings, both internal & external



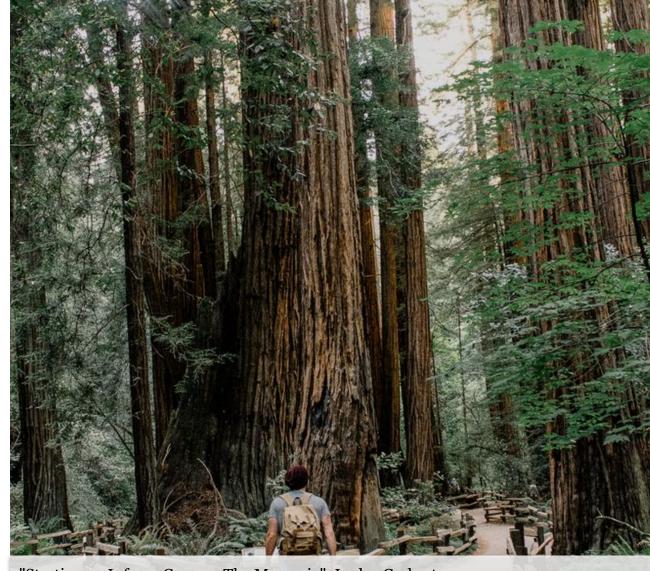
Speaker

Katie Knowles

- Manager, Threat Response
- BSEE, Rochester Institute of Technology
- OSCP, GPEN, GCSA
- Previously: Security Engineer, Penetration Tester & Consultant

What do you want?

- When you know what you want, the right opportunities will be obvious.
- Starting this *before* you're working full-time is easiest.
- Some questions you could ask:
 - What draws you to cybersecurity?
 - What are you hoping to learn? Earn?
 - What are your strengths?
 - What company culture are you looking for?Coworkers? Manager?
 - What would you aim for in 2-5 years?
- Don't worry about perfection!
- Your answers will likely change over time, but will keep you steady.



"Starting an Infosec Career - The Megamix", Lesley Carhart https://tisiphone.net/2015/10/12/starting-an-infosec-career-the-megamix-chapters-1-3/

"The Path to a Cybersecurity Governance Career", ISACA https://www.isaca.org/resources/news-and-trends/isaca-now-blog/2016/the-path-to-a-cyber-s

ecurity-governance-career

What's out there?

- Research opportunities online, checking major sites and individual companies.
- Copy descriptions of interest, & take notes:
 - What do I like about this role?
 - What skills are required?
 - What kind of culture does this company have?
 - How common is this role?
- This will help you understand what employers are looking for.
- Focus on themes in skills.
- This is a great time to network:
 - Reach out to new contacts politely asking if they can speak about their role.
 - Set a time limit, be polite, and follow up!
- Test roles with internships.



"How to Hunt for Jobs like a Hacker", Jason Blanchard

https://www.youtube.com/watch?v=Air1c697tjw

What's your focus?

- Review your skills of interest and job listing reconnaissance.
- What skills will you need?
- What foundations are required?
 - Networking?
 - Systems Administration?
 - Scripting or Coding?
 - Compliance Frameworks?
- Focus on one topic at a time.
- For your focus, take time on:
 - Study (or certification)
 - Talks, research, or challenges
 - 1+ project, blog post, personal research...
- Time to enjoy your topic will keep you energized about the future.



"The Importance of Deep Work & The 30-Hour Method for Learning A New Skill" https://azeria-labs.com/the-importance-of-deep-work-the-30-hour-method-for-learning-a-new-skill/

"Your 5 Year Path: Success in Infosec", John Strand https://www.youtube.com/watch?v=Uv-AfK7PkxU

How to solve problems

- Work and study will bring challenges, both with technology and with business.
- Any challenge can provide practice.
- Reflect on challenges as you solve them:
 - Is this problem technical, or non-technical?
 - What exactly am I looking to solve or learn?
 - Why is/isn't it working? What have I tried?
 - What do I know about the problem? What don't I know yet?
 - Have I seen a similar problem in the past?
- Take notes on solutions as you learn!
- Review how others have solved problems.
- Look for problems to use as opportunities.
- This will build skills, both in your studies and in the workplace.



picoCTF, Accessible CTF Challenges https://picoctf.org/

"How to (Holiday) Hack It", Katie Knowles https://www.youtube.com/watch?v=co2mH7F1xvU

Rock your role!

- Build non-technical skills alongside technical: Time management, writing, speaking, networking...
- Find informal mentors inside and outside your company.
- Look for chances to increase your scope.
- Get to know the business.
- Watch for what projects & people do well. How can we emulate it?
- Leave roles and employers on good terms.
- Stay curious, & try to learn everything you can before moving on.



"Manager Tools: Map of the Universe" https://www.manager-tools.com/map-of-the-universe

Potential Reads:

"So Good They Can't Ignore You", Cal Newport; "The First 90 Days", Michael Watkins

Thank you

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