



A Career in Cybersecurity

Cybersecurity Webinar Series

Speaker: Lonnie Harris

Hostess: Kara Sullivan

Cisco Networking Academy

18 October 2018

Welcome to the 3rd session of the Cybersecurity webinar series

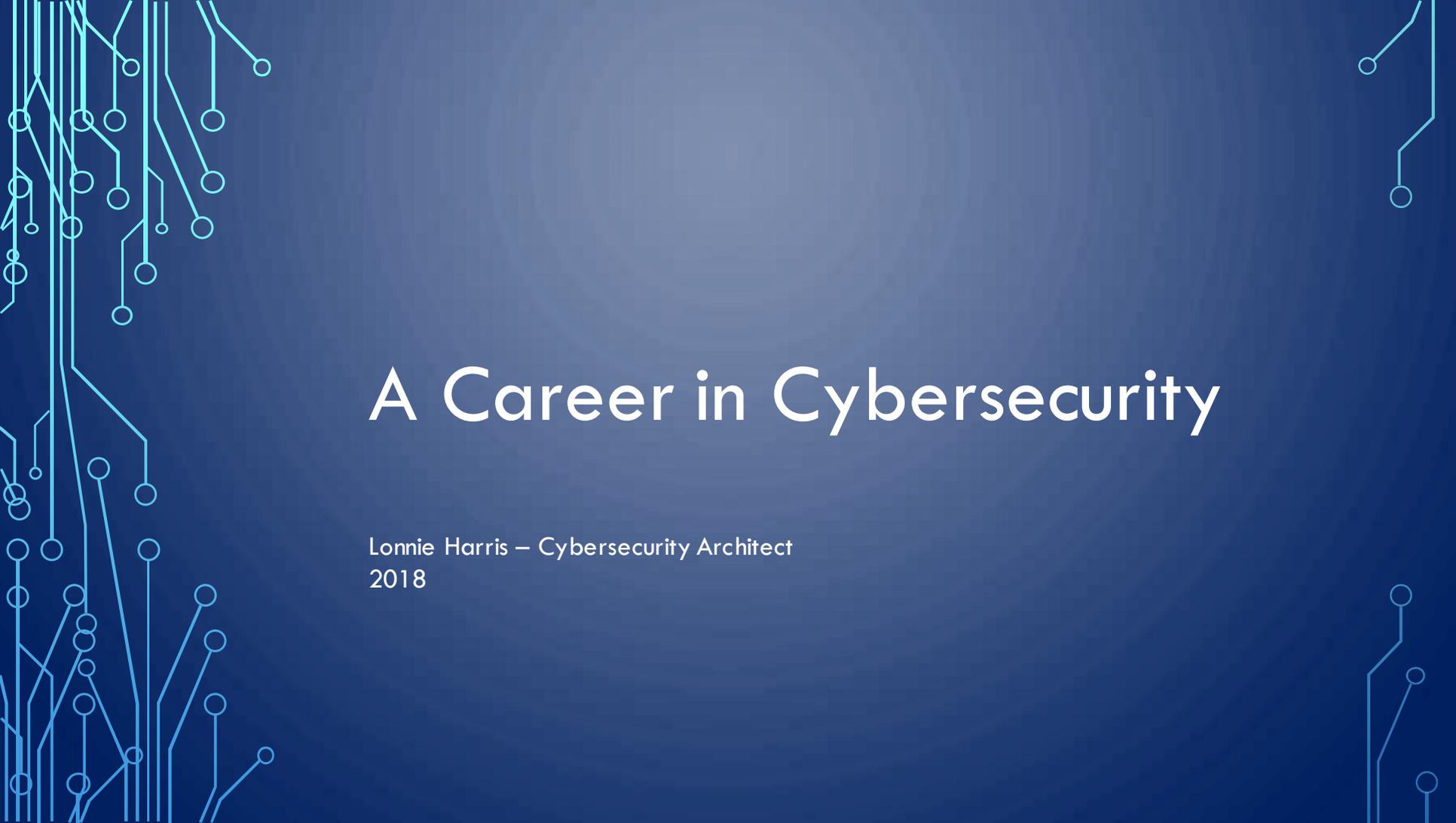
- Use the Q and A panel to ask questions.
- Use the Chat panel to communicate with attendees and panelists.
- A link to a recording of the session will be sent to all registered attendees.
- Please take the feedback survey at the end of the webinar.

• Cybersecurity Webinar Series

- Session 1: Cybersecurity Basics, Recording available
- Session 2: Security Threats & Breaches, Recording available
- Session 3: A Career in Cybersecurity, Today!

Access Series @

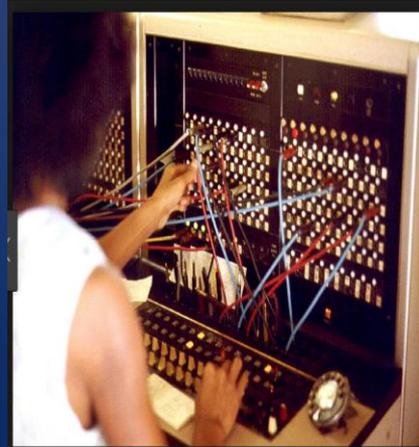
<http://bit.ly/cybersecseries>



A Career in Cybersecurity

Lonnie Harris – Cybersecurity Architect
2018

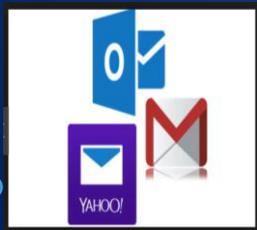
THE EVOLUTION OF COMMUNICATION - VOICE



THE EVOLUTION OF COMMUNICATION - INTERNET

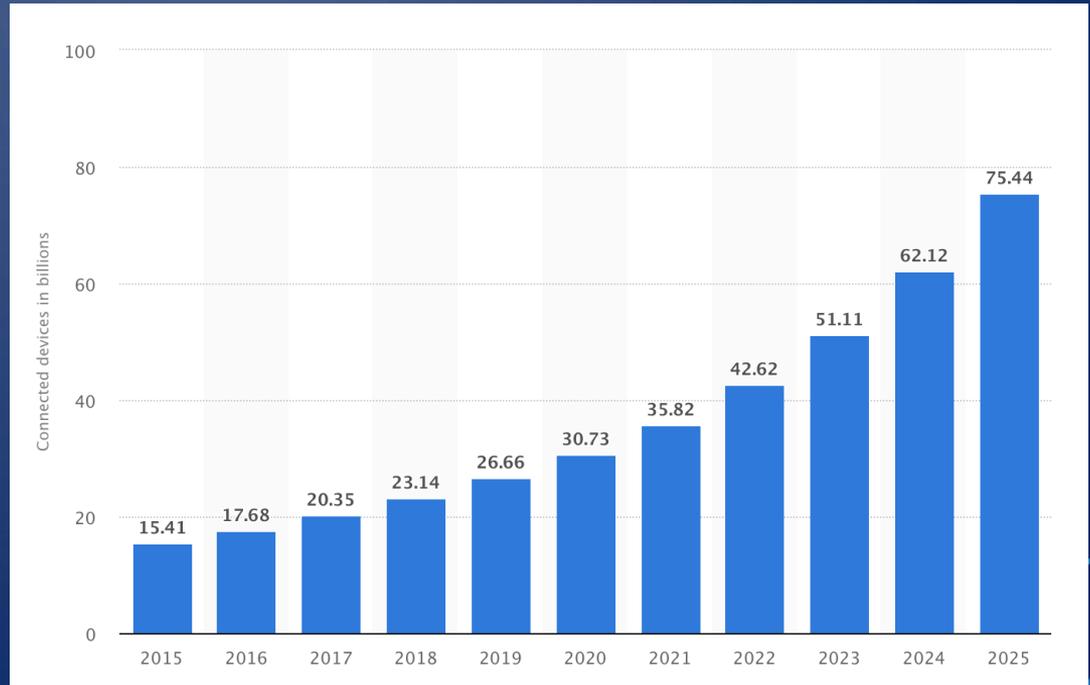


- Age of digital communication via computers
- Mosaic was the first browser for sound, video, forms, and history files
- Birth of world wide web (WWW)
- Email services – GMAIL, Hotmail, Yahoo
- The Internet of Things



THE EVOLUTION OF COMMUNICATION - (INTERNET OF THINGS IOT)

- Statistics shows the number of connected devices (IoT) worldwide from 2015 to 2025
- For 2020, the installed base of Internet of Things devices is forecasted to grow to almost 31 BILLION worldwide



CYBERSECURITY JOB REPORTS

- Every IT position is also a cybersecurity position now; having to be involved with protecting and defending apps, data, devices, infrastructure, and people. The cybersecurity workforce shortage is even worse than what the jobs numbers suggest.

Why Do We Need Cybersecurity?

Target Data Breach
Price Tag: \$252 million and Counting

In all, Target paid \$252 million in the data breach from the end of 2014 receipt of \$900 million in insurance proceeds in total net expense in 2015 and 2014 million.

Home Depot's Breach Is Bigger Than Target's

Home Depot estimates that the breach has cost approximately \$62 million, with more costs likely to come. The company believes it will be reimbursed \$27 million thanks to its insurance coverage.

The Morning News
Breach Could Cost \$171 million

...less than 2011's on Network breach cost \$171 million, in part exposed customer data, the Federal investigation says it is not clear that North Carolina is the culprit behind the breach.

Staples Provides Update on Data Security Incident

At 115 stores, the malware may have allowed access to this data for purchases made from August 10, 2014 through September 16, 2014. At two stores, the malware may have allowed access to data from purchases made from July 20, 2014 through September 16, 2014.

September 18, 2014
December 16, 2014
December 16, 2014

Cybersecurity Skills Crisis

Too Many Threats

- 62% INCREASE IN BREACHES IN 2013
- 1 IN 5 ORGANIZATIONS HAVE EXPERIENCED AN APT ATTACK*
- US \$3 TRILLION TOTAL GLOBAL IMPACT OF CYBERCRIME*
- 8 MONTHS IS THE AVERAGE TIME AN ADVANCED THREAT GOES UNNOTICED ON VICTIM'S NETWORK*
- 2.5 BILLION EXPOSED RECORDS AS A RESULT OF A DATA BREACH IN THE PAST 5 YEARS*

Too Few Professionals

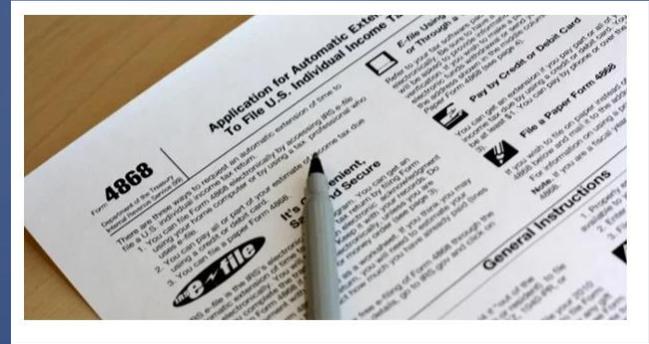
- 62% OF INDUSTRY SECURITY PROFS ARE NOT FAMILIAR WITH ADVANCED PERSISTENT THREATS
- 1 OUT OF 3 SECURITY PROFS ARE NOT FAMILIAR WITH ADVANCED PERSISTENT THREATS
- <2% OF STUDENTS HOLDING COMPUTER SCIENCE DEGREES
- 1 MILLION UNFULFILLED SECURITY JOBS WORLDWIDE*
- 83% OF ENTERPRISES CURRENTLY LACK THE RIGHT SKILLS AND HUMAN RESOURCES TO PROTECT THEIR IT ASSETS**

Enterprises are under siege from a rising volume of cyberattacks.

At the same time, the global demand for skilled professionals sharply outpaces supply. Unless this gap is closed, organizations will continue to face major risk. Comprehensive educational and retraining resources are required to meet the needs of everyone from entry-level practitioners to seasoned professionals.

SOURCES: 1. Increased Cyber Security Cost Study Global Economy Alliance, Monitoring World Economic Forum, January 2014 & 14 Points 2013: Attack the Security Gap, Manhattan, March 2013. 2. Increased Cyber Security Cost Study Global Economy Alliance, Monitoring World Economic Forum, January 2014 & 14 Points 2013: Attack the Security Gap, Manhattan, March 2013. 3. Increased Cyber Security Cost Study Global Economy Alliance, Monitoring World Economic Forum, January 2014 & 14 Points 2013: Attack the Security Gap, Manhattan, March 2013. 4. Increased Cyber Security Cost Study Global Economy Alliance, Monitoring World Economic Forum, January 2014 & 14 Points 2013: Attack the Security Gap, Manhattan, March 2013. 5. SANS's 2014 APT Study, SANS, April 2013. 6. SANS's 2014 APT Study, SANS, April 2013. 7. SANS's 2014 APT Study, SANS, April 2013. 8. Code.org, February 2014. 9. 2014 Cyber Annual Security Report: 80, Cybersecurity Skills News and News Note, ESG, March 2014.

CSX **HSACA**



Russians Attack 2018 U.S. Elections Via Facebook, Social Media

DAVID PIERSON, LOS ANGELES TIMES - MCCLATCHY ON AUG 1, 2018



Major life-threatening cyber attack on UK 'in little doubt' in near future, warns security chief

The National Cyber Security Centre warns that a life-threatening incident will almost inevitably strike the UK.

00:14, UK,
Tuesday 16 October 2018



We'd be crippled by a cyberattack on our utilities

Washington Post

1 day ago



ONWASA victim of cyber attack; utility refuses to pay ransom

WITN

11 hours ago



Q WHAT WILL THE WARRIOR-GUARDIAN OF THE FUTURE LOOK LIKE?

CYBER SECURITY

Yo! DUDE... BACK HERE

KAL The Cartoonist

EXERCISE

- Open a web browser and navigate to the Shodan [website](https://www.shodan.io/) at <https://www.shodan.io/>.
- After successfully logging in, you will see your account page, as shown below. Click the **Shodan** link to return to the homepage.
- top web cameras used for home security
- Nest Cam Indoor Network Camera - 3 MP - 1080p - Day/Night - 3 Pack rated 4.5 out of 5 stars [,922 reviews](#)
- Type **NEST** as the keyword and press **Enter**. How many results did you get for your search
- Attackers looks for unsupported operating system, known vulnerabilities or published attacks
- Use an Internet search to discover the well-known 2017 cyberattack that targeted older Windows operating systems

CHOOSING THE RIGHT SIDE

cy·ber·at·tack

/ˈsɪbərəˌtæk/ 

noun

noun: **cyber-attack**

an attempt by hackers to damage or destroy a computer network or system.

eth·i·cal hack·er

noun

noun: **ethical hacker**; plural noun: **ethical hackers**

a person who hacks into a computer network in order to test or evaluate its security, rather than with malicious or criminal intent.

"ethical hackers are becoming a mainstay of the effort to make corporate networks more secure"

CYBERSECURITY ROLES AND SKILLS

Job Title	Skills
<ul style="list-style-type: none">• Network Engineer	<ul style="list-style-type: none">• Network Admin, Troubleshooting, TCP/IP, Software Installation, Active Directory
<ul style="list-style-type: none">• Systems Engineer	<ul style="list-style-type: none">• Servers, Storage, Data Center, Cloud Computing, Networking
<ul style="list-style-type: none">• Software Developer	<ul style="list-style-type: none">• Programming ,JavaScript, Python, Databases, Data Analytics
<ul style="list-style-type: none">• Business Analyst	<ul style="list-style-type: none">• Business Analysis, Microsoft office, Project Management, Process Management, Requirements Analysis
<ul style="list-style-type: none">• Data Analysts	<ul style="list-style-type: none">• Data Analysis, Customer Support, Organization skills, Microsoft Office, Problem Solving
<ul style="list-style-type: none">• Software/System QA	<ul style="list-style-type: none">• Software Development, Test Suites, Troubleshooting, Requirements Analysts, Web Design
<ul style="list-style-type: none">• Systems/Network Administrator	<ul style="list-style-type: none">• Network Operations, DevOps, Troubleshooting, Integration, Customer Services
<ul style="list-style-type: none">• Technical Support	<ul style="list-style-type: none">• Troubleshooting, Customer Service, Microsoft Office, Windows, hardware/Software
<ul style="list-style-type: none">• Security Engineer	<ul style="list-style-type: none">• Network Security, Linux, Vulnerability Assessment, Firewalls, Intrusion Detection

RESOURCES TO GET STARTED

- Cyber Seek is helping to close the cybersecurity skills gap by creating interactive career pathway <https://www.cyberseek.org>
- Cisco Networking Academy <https://www.netacad.com>
- 1000+ cybersecurity analysts jobs in North Carolina 10/16/2018

The screenshot shows an Indeed job search page for "Cyber Security Analyst" in "North Carolina". The search results are sorted by relevance and date. The page displays several job listings, including "Cyber Security Analyst" at NetApp and "Cyber Security Analyst" at CyberCoders. A salary estimate table is visible on the left, and a bar chart on the right shows IT Security Specialist salaries in North Carolina, with a highlighted bar for \$96,598 per year based on 158 salaries.

indeed

What: Job title, keywords, or company
Where: City, state, or zip code

Cyber Security Analyst North Carolina Find Jobs Advance

Cyber Security Analyst jobs in North Carolina Page 1 of 395 jobs

Upload your resume - Let employers find you

Show: all jobs - 180 new jobs

Cyber Security Analyst - new
NetApp ★★★★★ 612 reviews
Durham, NC 27703
Information Security Analyst. Competent at intermediate change configurations in more than one security technologies - Knowledge and operational experience...
Sponsored save job

Cyber Security Analyst - new
CyberCoders ★★★★★ 34 reviews
Durham, NC 27701
\$75,000 - \$85,000 a year
Cyber Security Analyst. If you are a Cyber Security Analyst with experience, please read on! So, if you are a Cyber Security Analyst with experience, please...
Sponsored 2 hours ago save job

Cyber Threat Analyst - new
Eliassen Group ★★★★★ 81 reviews
Morrisville, NC
Cyber Threat Analyst, Cyber Security, Information Assurance, Intelligence Analysis, TTP, Requirements of the Cyber Threat

My recent searches

Vulnerability Assessment Analyst
1,070 new

SAS Programmer - Raleigh, NC 26 new
clear searches

Sort by:
relevance - date

Salary Estimate

\$75,000	(316)
\$80,000	(281)
\$90,000	(195)
\$95,000	(153)
\$110,000	(68)

Job Type

Full-time	(364)
Contract	(27)
Part-time	(6)
Commission	(2)

Be the first to see new Cyber Security Analyst jobs in North Carolina

My email:

Also get an email with jobs recommended just for me

Activate

IT Security Specialist salaries in North Carolina

\$96,598 per year
Based on 158 salaries

Min	\$24,000	Max	\$218,000
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ARE YOU READY ✓

- Is there strong demand for cybersecurity jobs in my region? ✓
- Do I know of cybersecurity educational and training resources? ✓
- I do not need to have a IT background. ✓
- Is there a future in the cybersecurity beyond tomorrow? ✓
- Do I have a desire to protect the services and societal growth provided by the Internet? ✓



**WANTED AND URGENTLY NEEDED:
CYBERSECURITY PROS TO
SERVE THEIR COUNTRY**

RESUME PLACE

Q&A



Qualifications for Certificate of Participation



Must Participate in all 3 sessions of the Cybersecurity webinar series – whether through recordings or live sessions



Opportunity to earn a certificate will stay open for one month – until 18 November



Request certificate @ <http://netacad.cvent.com/CertificateRequestForm>

Intro to Cybersecurity Self-Enroll Course

Introduction to Cybersecurity

Learn how to protect yourself online and in social media while discovering careers in cybersecurity.

Enroll Now



You can enroll today to learn more @ <http://bit.ly/introsecurity>

