

The background of the slide is a dark, high-contrast image of a circuit board. A central integrated circuit (chip) is visible, surrounded by a dense network of fine lines representing the circuit traces. The overall aesthetic is technical and digital.

# My Cybersecurity Career Path and Guidance for Yours

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MARIA BROWN

OWASP PHOENIX MEETUP

APRIL 2024

# Topics



My Experience.. With Tips for You

15 Minutes



Cybersecurity Career Resources

3 Minutes



Where Are You Starting At?

5 Minutes



Applying for Cyber Jobs Advise

1 Minute



Cyber Career – Long-Term Success Tips

1 Minute

# Career Path



**Jacoby & Meyers**  
PERSONAL INJURY ATTORNEYS

Receptionist

Schoen & Smith, Ltd.  
Chicago, IL

Legal Secretary



Hostess



Crab  
Seller



**ASU** Arizona State  
University

Computer Systems Engineer



**MOTOROLA**



Gateway Systems Engineer

Kimley»Horn

Traffic Systems Engineer

**Medtronic**

17 Years  
Until 2017

Principal Software Engineer

**Medtronic**

Sr. Principal  
Application Security Engineer

7 Years  
2017 - Now

# How I Transitioned Careers in 2 Years

1. Community Groups
2. Industry Conferences
3. Image Re-branding
4. Self-Guided Learning
5. Hands-On Learning
6. Industry Certifications





# Community Groups

## My Community Groups

- OWASP Meetup

## Local Meetup Groups



**OWASP Phoenix Chapter**  
<https://www.meetup.com/owasp-phoenix-chapter>



**We Protect PHX**  
<https://www.meetup.com/we-protect-phx>



**EVSec Community**  
<https://www.meetup.com/evsec>  
[Event April 4](#)

*Nowhere near a complete list!*

## Remote Meetup Groups

### Largest Cybersecurity groups

**1 FutureGPT: AI/ML, Cyber Security, Blockchain, AR/VR & IoT**

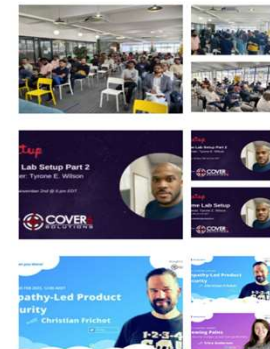
17,761 Innovators | Bangalore, India  
Organized by Nayyan Mujadiya

**2 D.C. Cybersecurity Professionals**

10,225 CyberWarriors | Arlington, USA  
Organized by Tyrone E. Wilson

**3 OWASP DevSlop Project**

6,733 Members | Ottawa, Canada  
Organized by OWASP® Foundation



<https://www.meetup.com/topics/cybersecurity>

# Industry Conferences

## My Conferences

- OWASP AppSec California
- OWASP App Sec USA
- Blackhat / Defcon
- Cactus Con

## Local Conferences



CactusCon

Career Village

<https://infosec-conferences.com/us-state/arizona>

## Nationwide and Regional Conferences



*Nowhere near a complete list!*

# Image Re-Branding

## My Re-Branding

- Company profile
- Security forum postings
- Business Cybersecurity Review – Sister's Office

### Cybersecurity Help



Help friends and neighbors  
with security reviews

### Blog Posts



Write blog posts as you learn  
new stuff

### Public Speaking



Speak at community groups as  
you learn topics

### Tell Everyone



Present yourself as a person  
pursuing cybersecurity

*"Don't compare your beginning to someone else's middle."*

# Self-Guided Learning

## My Learning Tools

- Pluralsight Skill Builder
- OWASP Podcasts

### Learning Tools



**PLURALSIGHT**

<https://www.pluralsight.com>

**CYBRARY**

<https://www.cybrary.it>

### Cybersec Videos



@DEFCONConference

@CactusCon

@OWASPGLOBAL

**SecurityTube**

<http://www.securitytube.net>

### Industry News

**DARK**  
Reading

<https://www.darkreading.com>

**The Hacker News**

<https://thehackernews.com>

*Nowhere near a complete list!*



# Hands On Learning

## My Hands On Learning

- CactusCon Root The Box CTF

### Skill Practice Platforms



<https://tryhackme.com>



<https://www.hackthebox.com>

<https://github.com/joe-shenouda/awesome-cyber-skills>

# Certifications

## My Certifications (self-funded)

- 2015 - CISSP - Associate Certified Information Systems Security Professional
- 2016 - CEH – Certified Ethical Hacker
- 2017 - CES – Certified Encryption Specialist
- 2017 - CCSK – Certificate of Cloud Security Knowledge

### Entry Level Skill Certifications



### Entry Level Cloud Certifications



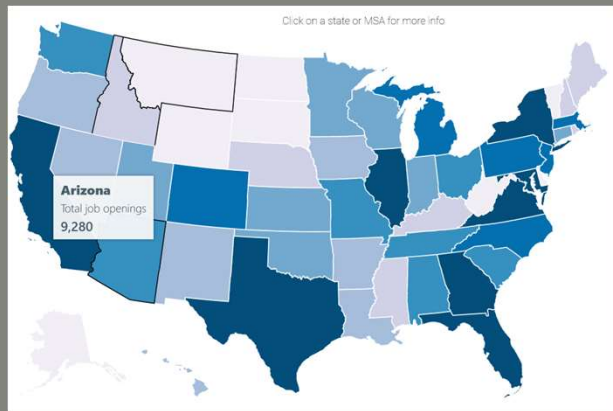
### Mid-Career Certification



**Certified  
Information  
Systems Security  
Professional**

*Nowhere near a complete list!*

# Cybersecurity Certification Heat Map



## CERTIFICATION HOLDERS / OPENINGS REQUESTING CERTIFICATION ⓘ

■ Certification holders

■ Openings requesting certification

Certified Information  
Systems Security  
Professional (CISSP)

**66,011**

CompTIA Security+

**63,345**

Certified Information  
Systems Auditor (CISA)

**42,927**

Global Information  
Assurance Certification  
(GIAC)

**34,092**

Certified Information  
Security Manager (CISM)

**31,585**

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

## Cybersecurity Career Resources



General Public

Federal Employees

High School  
Students

## NICCS®

General Public

The National Initiative for Cybersecurity Careers and Studies (NICCS) website is the premier online resource for cybersecurity **training**, **education**, and **career** information. NICCS connects government employees, students, educators, and industry with cybersecurity resources and training providers throughout the Nation.

<https://niccs.cisa.gov>

## Federal Virtual Training Environment (FedVTE)

- Federal government employees and contractors
- State, Local, Tribal, and Territorial (SLTT) government employees
- U.S. military personnel and Veterans
- General public

Government + Public

<https://niccs.cisa.gov/education-training/federal-virtual-training-environment-fedvte>



High School Students

The **AZ Cyber Initiative** is dedicated to unlocking opportunities for young people who are interested in cyber and emergent technology. We collaborate with workforce partners across the state to offer programs including **bootcamps**, **internships**, and **mentorships**.

<https://azcyber.org>

# Women



WiCyS has professional and student **communities, professional development programs, mentor/mentee programs**, virtual and in-person **conferences/career fairs, Job Board++**, **resources**, and **events** for women in cybersecurity and their supporters.

<https://www.wicys.org/wicys-phoenix-az>



**Women's Society of Cyberjutsu (WSC)** mission is to advance women in cybersecurity careers by providing programs and partnerships that promote **hands-on training, networking, education, mentoring, resource-sharing and other professional opportunities**.

<https://womenscyberjutsu.org>



## Women's Cyber Academy

An intensive, accelerated training program that provides SANS world-class **training and GIAC certifications** to quickly and effectively launch careers in cybersecurity. SANS Cyber Academies are 100% scholarship-based, at **no cost to participants**.

<https://www.sans.org/cyber-academy/womens-academy>



# Veterans

NICCS®

## Cybersecurity for Veterans

To help Veterans enter this rewarding career field, CISA provides **Cybersecurity Training and Education for Veterans**: A **user guide** for those who formerly served in the U.S. Armed Forces. This guide includes a variety of **tools** and **resources** to help Veterans begin a career in cybersecurity including **free online training** and **certification prep courses**, information on cybersecurity-related degree programs and **scholarships**, and much more.

<https://niccs.cisa.gov/education-training/cybersecurity-veterans>

**NIST**  
National Institute of  
Standards and Technology  
U.S. Department of Commerce

Career  
Preparation and  
Educational  
Topics

Federal  
Resources for  
Veteran Job  
Seekers

Non-Profit  
Resources

<https://www.nist.gov/itl/applied-cybersecurity/nice/resources/veteran-resources>

# Underrepresented



Minorities in Cybersecurity

Minorities in Cybersecurity (MiC) – our mission to provide **practical knowledge, training, development, and support** to our members with the sole purpose of preparing them to become the next generation of global cybersecurity leaders.

<https://www.mincybsec.org>



The IOBSE is dedicated to providing quality security and management **focused educational programs**. These programs are designed to serve members at all career levels from students to practitioners to senior executives.

<https://iobse.org>



To achieve the consistent representation of women, underrepresented communities, and all veterans in the cybersecurity industry through programs including **career exploration, mentorship, and community** designed to diversify, educate, and empower.

<https://www.cyversity.org>

<https://www.cyberdegrees.org/resources/cybersecurity-resources-for-underrepresented-populations>

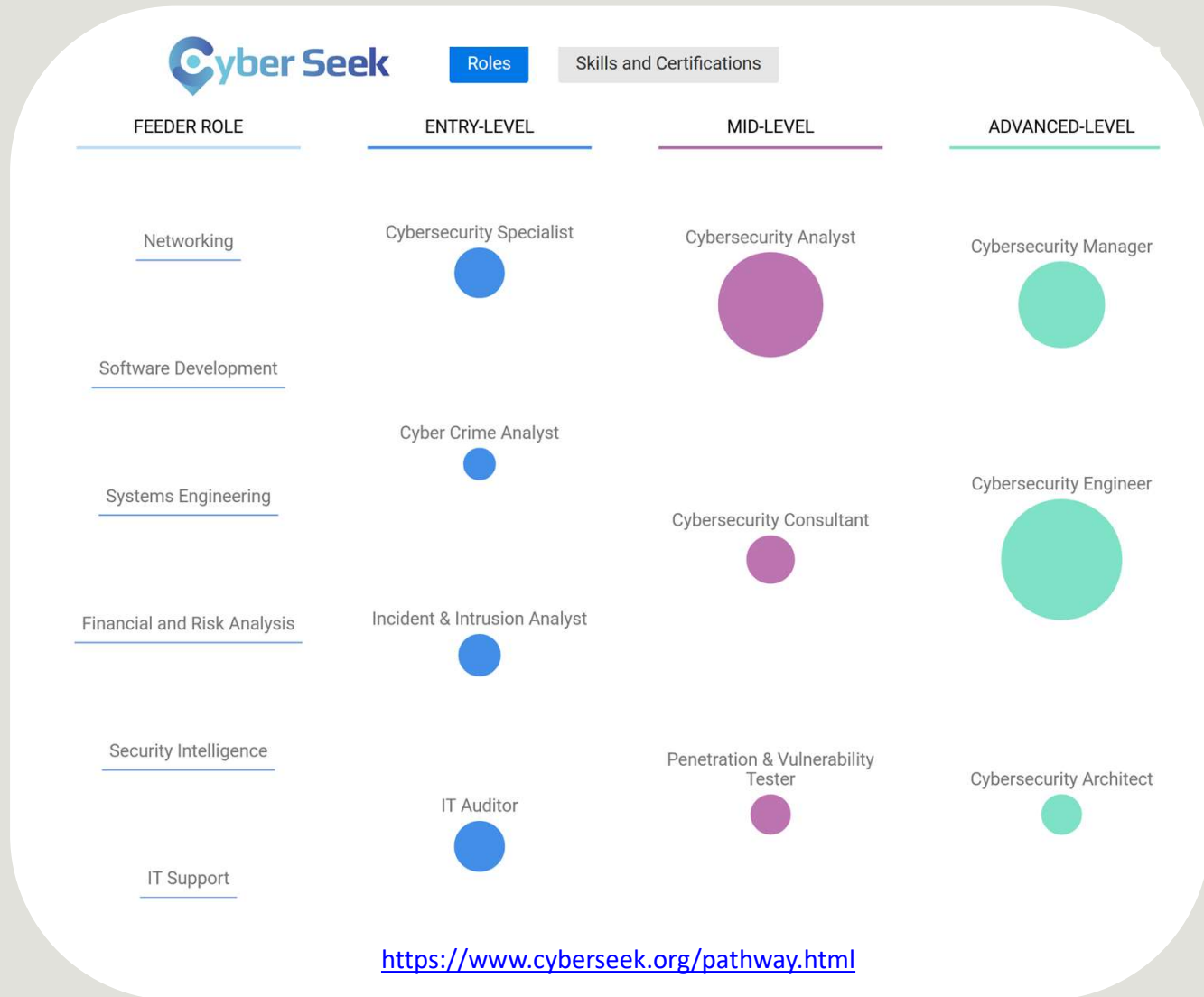
Where are You Starting At?

CAREER



# IT Industry

## Cybersecurity Career Pathways





# Non-IT to Cybersecurity



## InfoSec Sherpa

Tracy Maleeff (@InfosecSherpa) was a professional law Librarian and at the top of her game. Looking for change and meaning, she searched until she found the field of Information Security.

<https://www.gettingintoinfosec.com/videos/infosecsherpa-from-travel-agent-to-law-librarian-to-security-analyst>

## GETTING INTO INFOSEC

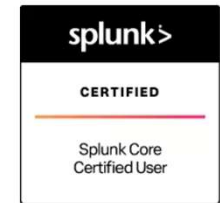
Podcast with unique stories of **how people got jobs in Information Security** (aka cybersecurity). Hear stories of **librarians, hair dressers, mechanics, and more** finding their path into the security field!

[https://www.youtube.com/channel/UCg6gV\\_gdfc188HZdN8LUx4A](https://www.youtube.com/channel/UCg6gV_gdfc188HZdN8LUx4A)

# Breaking Into Cybersecurity Key Skills and Certifications

## Security Analyst

### Certifications



### Core Skills and Hands On Learning



Sources:

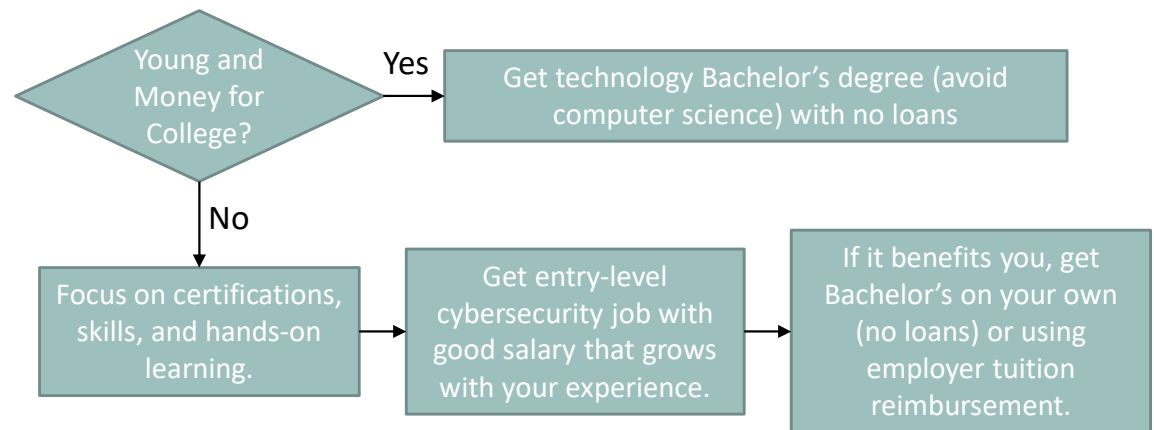
[Federal Cyber Defense Skilling Academy - Cyber Defense Analyst Skills](#)

[BowTiedCyber Cybersecurity Career Roadmap](#)



# No College Degree

## Degree Recommendation Flowchart



## Highly Affordable, High Quality Bachelor's Degree

### Phoenix College - Bachelor's of Applied Science in Information Technology

Students will be prepared to pursue a variety of occupations within the IT industry, such as Network or Database Administrators, IT Project Managers or Systems Analysts, and Cyber Security Specialists.

<https://www.maricopa.edu/degrees-certificates/bachelors-degrees/information-technology-bas>

# Applying for Cyber Jobs

## Resume



1 Page Resume  
Application Tracking Software  
(ATS) friendly

## Job Applications



Lots of Applications 1K++  
In Person Whenever Possible

## Top Platforms

**Linked in**

**indeed**



**ZipRecruiter**

## Disconnects

When employers want 10 years of  
experience before you turn 20



Entry-Level jobs asking for CISSP and  
Bachelor's Degree

# Cybersecurity Career

## Keys to Long-Term Success

### Keep Learning



Industry Trends  
Advanced Certifications

### Share Ideas



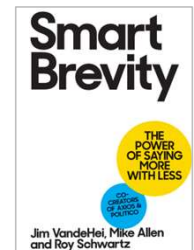
Share What You Know

### Mentor and Encourage



Help Others at Every Opportunity

### Communication Skills



Make All Your Communications  
High Quality

*Thank You For Your Time!*

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[www.linkedin.com/in/mariabrown](https://www.linkedin.com/in/mariabrown)

