Hacking Your Cybersecurity Career

Ron Woerner
Bellevue University

The more things change, the more they stay the same.

~ Alphonse Karr
I’d tell you who I really am, but do you really care?

Ron Woerner
Cybersecurity Professor, Bellevue University
IT Consultant
How do I get a job in Cybersecurity?
Blogs & Resources

• *Choosing Your Cybersecurity Career*  


• *Cybersecurity Careers: Hacking Your Next Job:*  

Blogs & Resources

  – Please use this for your questions and comments

Cybersecurity Jobs Report 2018-2021

Cybersecurity Ventures predicts there will be 3.5 million cybersecurity job openings by 2021

https://cybersecurityventures.com/jobs/
Summary

Quick Facts: Information Security Analysts

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$98,350 per year</td>
<td>Bachelor’s degree</td>
<td>Less than 5 years</td>
<td>None</td>
<td>112,300</td>
<td>32% (Much faster than average)</td>
<td>35,500</td>
</tr>
<tr>
<td></td>
<td>$47.28 per hour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What Information Security Analysts Do

Information security analysts plan and carry out security measures to protect an organization’s computer networks and systems.

Work Environment

Most information security analysts work for computer companies, consulting firms, or business and financial companies.

How to Become an Information Security Analyst

Most information security analyst positions require a bachelor’s degree in a computer-related field. Employers usually prefer to hire analysts with experience in a related occupation.

Pay

The median annual wage for information security analysts was $98,350 in May 2018.
Goals

• Landing and keeping a **job** in cybersecurity
• What’s best for your Cybersecurity **career**: a **certification** or a degree?
• **Strategic** (GRC) vs. Tactical (Technical)
WARNING
RANTING AHEAD
USE CAUTION
Requirements

Experience

Education

Certifications
Requirements

Tech Skills

Functional Knowledge

Personal Abilities
Getting Experience

• Practice, practice, practice
  – Set up your own home lab
  – Mentor
  – Volunteer
  – CTFs

• Get your foot in the door
  – PC Support / Technician
  – Help / Service Desk
Cybersecurity Career Paths

• Strategic
  – GRC / Policy
  – Management
  – IT Audit

• Tactical
  – Technical
  – Systems administration, networking, application security, security operations, incident response, vulnerability management, and penetration testing
Cybersecurity Career Pathway

[Diagram showing the career pathway from Entry-Level (Cybersecurity Specialist/Technician, Cyber Crime Analyst/Investigator, Incident Analyst/Responder, IT Auditor) to Mid-Level (Cybersecurity Analyst, Cybersecurity Consultant, Penetration & Vulnerability Tester) to Advanced-Level (Cybersecurity Manager/Administrator, Cybersecurity Engineer, Cybersecurity Architect)]

https://www.cyberseek.org/pathway.html
Cybersecurity Supply/Demand Heat Map

Cybersecurity talent gaps exist across the country. Closing these gaps requires detailed knowledge of the cybersecurity workforce in your region. This interactive heat map provides a granular snapshot of demand and supply data for cybersecurity jobs at the state and metro area levels, and can be used to grasp the challenges and opportunities facing your local cybersecurity workforce.

https://www.cyberseek.org/heatmap.html
Building Knowledge

- Education / Degrees

- Training / Certifications
Certifications

• ISC²
• ISACA
• SANS
• Offensive Security
• EC-Council
Other stuff you need / Functional Abilities

- Attitude (preferably good)
- Communications (Writing & Speaking)
- Teamwork
- Critical Thinking
- Tenacity
Hacking Your Career Tips

• Visualize Your Goals – what do you want to be when you grow up & why?
• Social Engineer Your Next Boss
• Be Open to Opportunities
• Actively Learn
• Practice, Practice, Practice
• Be a Hacker
Networking
(the human kind)
Blogs & Resources

• *Choosing Your Cybersecurity Career*


Blogs & Resources


• Breaking Into Information Security, (book)
Others?
Solution = Kids

http://www.uscyberpatriot.org
OWN
SECURE
PROTECT

OCTOBER 2019
National Cybersecurity Awareness Month
#BeCyberSmart

https://staysafeonline.org/ncsam/
Tuesday, Oct. 22, 2019
8 a.m.-4 p.m.
Southeast Community College
8800 O St., Lincoln, NE

Early Bird Rate (by Sept. 20): $99
Education Rate: $79
Regular Rate (after Sept. 20): $119


Keynote Speaker

Chris Schreiber

Swimming with Sharks: Understanding and Countering Cyber Threats
Learn How to Protect Your Organization From Phishing Email Attacks!

Wednesday, October 31, 2018
Time: 8:30 am - 11:00 am

8:30 am – 9:00 am  Registration and Breakfast
9:00 am – 11:00 am  Keynote/Breakout Sessions

Metropolitan Community College - Fort Omaha Campus
(5370 North 30th Street Omaha, NE 68115)
Center for Advanced and Emerging Technology
Building 24

PROGRAM TOPICS

The Social Engineering of Phishing Scams
Karla Carter, Cybersecurity Professor, Bellevue University

What Is Phishing/How Does Your Company Protect Its Information
Gary Sparks, Information Technology Instructor, Metro Omaha Community College

Combating Phishing Attacks in Larger Organizations and Financial Institutes
Kerry Kremke, CSO, Blue Cross and Blue Shield of Nebraska
Jeff Weeks, SVP and CISO, First National Bank

RSVP: Go to bbb.org/Nebraska and click on the “Cybersecurity Event” tab on the top of the page.
Share & Learn

By working together, we all become safer and more secure

Ron Woerner, RWX Security Solutions
Security Groundhog Day

Ron Woerner
RWX Security Solutions, LLC
Ron.Woerner@rwxsecurity.com
Twitter: @ronw123

Bellevue University
rwoerner@Bellevue.edu