

Career Empowerment Conference Sept 7, 2024

Info Session Starting a Career In Cybersecurity

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Session Expectation

- □ Understand the Cybersecurity Profession
- Identify various cybersecurity career paths
- Know key requirements to enter and sustain a successful career
- □ Explore Cybersecurity career journey map
- Identify key Resources for effective career Resume writing, certifications and professional bodies
- □ Identify common career pitfalls and mitigation strategies
- □ Examine compensations in Cybersecurity
- Discuss Career Action Plan

Cybersecurity Profession- Overview

□ Cybersecurity has emerged as a critical field within the realm of information technology, focusing on protecting digital assets, networks, and sensitive information from cyber threats.

□ The demand for cybersecurity professionals has surged in recent years, driven by the exponential growth in cyber threats and the increasing reliance on digital platforms.

Organizations across industries, from finance to healthcare and government sectors, are actively seeking skilled professionals who can mitigate risks and respond effectively to security incidents





Why Cybersecurity

Diverse - Something for everyone.

□ High need for skilled cybersecurity professionals.

Opportunities to solve problems and develop unique solutions.

□ Above average compensation

□ Job flexibility



Career Path in Cybersecurity

Cybersecurity Analyst - Technical or Business	
Mobile & Network Security Analyst	
Security Operations Center (SOC) Engineer	
Cybersecurity Consultant	
Web Application Security Analyst	
Incident Response and Forensics Analyst	
Threat & Vulnerability Management Analyst	
Penetration Tester / Ethical Hacker	
Governance Risk & Compliance Analyst	
Cybersecurity Engineer	
Cybersecurity Architect	
Cybersecurity Manager	
Cybersecurity Leadership BISO / CISO / CSO	



Top Cybersecurity Career Paths				
Career Path:	Purpose:	Job Titles:		
Engineering	Digital infrastructure security systems creation, implementation, and maintenance	 Security Engineer Application Security Engineer Cloud Security Engineer Network Security Engineer 		
Testing	System, application, and network evaluation for potential security vulnerabilities	 Penetration Tester Vulnerability Assessor Security Auditor 		
Analysis	Data, system, and pattern examination to understand and mitigate cyber threats	 Cybersecurity Analyst Threat Intelligence Analyst Security Operations Center Analyst Intrusion Analyst 		
Response	Security breach first responders to minimize damage, eradicate threats, and restore operations	 Incident Responder Cybersecurity Incident Manager Forensic Analyst 		
Auditing	IT systems and operations evaluation for regulatory compliance and best practices	 Cybersecurity Auditor IT Compliance Auditor Security Control Assessor 		



Key requirements

□ Strong understanding of IT fundamentals

Critical thinking skills,

Problem-solving abilities,

□ Soft Skills (Communication, change management) and

□ a commitment to continuous learning and development.

It shouldn't start with certification !



Critical skills for successful career

Skills we generally would see in these positions include:

- Ability to lead complex initiatives and diverse groups of people
- Ability to solve complex problems under pressure
- Decisiveness
- Understand the business
- □ Ability to communicate clearly
- □ Proactiveness and willingness to learn
- □ Ability to work through adversity
- Foundational technical skillset

Technical knowledge to enrich your competence include:

- □ Security Principles
- **Risk Analysis**
- □ IT infrastructure /Cloud
- Network Protocols
- Intrusion Detection
- □ Scripting
- Programming Skills
- Data Analysis
- **D** Ethical Hacking



Starting with no Experience



Suggested Career Roadmap

Entry-Level Positions

G Specialization and Certifications

□ Advanced Roles and Leadership

Continual Growth and Learning

Roadmap to become a cyber security expert · Develop a strong Gain expertise in networking Learn programming Start with a strong understanding of languages protocols and technologies educational foundation fundamental IT concepts Study foundational cyber Familiarize yourself with security concepts various operating systems Obtain relevant certifications Specializing in penetration testing Gain hands-on experience Stay updated Build a professional network Uphold ethical standards Continuous Learning Aim for higher-level role

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Common Career Pitfalls

□ Lack of continuous Learning

□ Neglecting Soft Skills

Compliance Awareness And Training

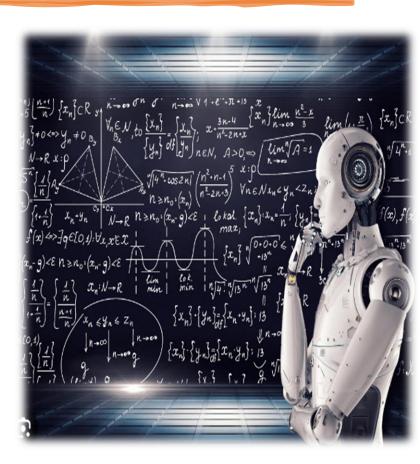
□ Neglecting current security news and trends

□ Not thinking about your customer



Mitigating Strategy for Pitfalls

- □ Be a lifelong learner
 - Regularly participating in training programs, workshops and industry events
- □ Invest in Soft skills
 - Invest time in improving communication, leadership and problem-solving skills
- □ Be aware of the threat, regulatory and technology trends
- Stay informed about legal and regulatory requirements through courses, certifications and internal training programs
- Think Business /organizational goals
 - Cybersecurity is about solving problem, understand the problem and the problem owner. Know more about your customer, current challenges etc





Relevant Professional bodies

- □ Participate as part of career development
- Best community to develop good networking skill and build professional stature
- □ Make sure it is relevant to your chosen path

Common ones include:

- ISC2 (Information System Security Certification Consortium)
- □ ISACA (Information Systems Audit and Control Association)
- **CompTIA** (The Computing Technology Industry Association)
- IIBA (Cybersecurity Stream)







Relevant Cybersecurity Certification.

Depends on your career path, narrow your focus, align to one or 2 domains, look at the job market, be strategic

General – Experienced – Certification include:

- □ Certified Information Systems Security Professional (CISSP)®
- □ Certified Information Systems Auditor (CISA)®
- □ Certified Ethical Hacker (CEH)
- □ Certified Information Security Manager (CISM)
- □ CompTIA Advanced Security Practitioner (CASP+)
- □ GIAC Security Essentials Certification (GSEC)

Entry – Certification include:

- □ CompTIA Security+
- □ IIBA CCA
- CC Certified in Cybersecurity ISC2
- □ GIAC Information Security Fundamentals (GISF)
- □ Systems Security Certified Practitioner (SSCP)



Cybersecurity roles payscale 💰



High

\$74.83

Salaries in Cybersecurity

How much does a Cyber security make in Canada?



Quebec	<u>\$133,530</u>	Based on 329 salaries
New Brunswick	\$128,133	
Saskatchewan	\$125,000	
Nova Scotia	\$124,956	
Ontario	\$124,205	
British Columbia	\$124,035	
Manitoba	\$116,508	
Alberta	\$113,000	

How much does a Cyber security make in Canada?

\$64.06 / Hour

Based on 2764 salaries

The average **cyber security** salary in **Canada** is **\$124,924** per year or **\$64.06** per hour. Entry-level positions start at **\$97,501** per year, while most experienced workers make up to **\$145,915** per year.

Job Title	Range	Average
Cyber Security Analyst	C\$53k - C\$103k	C\$71,700
Security Analyst	C\$51k - C\$90k	C\$69,067
Information Security Analyst	C\$58k - C\$108k	C\$74,091
Security Engineer	C\$69k - C\$134k	C\$92,678
Information Security Manager	C\$80k - C\$131k	C\$108,320
Security Architect, IT	C\$89k - C\$142k	C\$115,889
Cyber Security Engineer	C\$64k - C\$126k	C\$98,699
Information Security Specialist	C\$64k - C\$107k	C\$85,292
Senior Security Consultant	C\$72k - C\$129k	C\$98,078
Chief Information Security Officer	C\$112k - C\$243k	C\$157,501

Low

\$50

Median

\$64.06

Resume Tips for Effective Positioning

Tailoring your resume

□ Showcase your technical Skills

Highlighting your achievements





Key Resources

Job Boards

- Indeed, CyberSecJobs, LinkedIn, Teamblind and Dice
- Mentoring References: Seek guidance and advice from experienced cybersecurity professionals through mentorship programs, networking events, and online forums
- Associations: Join industry-focused associations such as ISACA, (ISC)², and CompTIA to access networking opportunities, resources, and professional development support.
- Learning Platforms: Springboard, TryhackMe. LinkedIn Learning. Cvbrary, Coursera, Udemy, edX, Pluralsight, YouTube videos





Career Progression – Action Plan

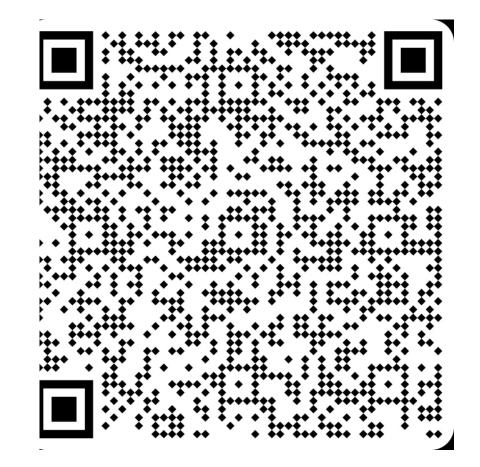
- □ Goal Setting: Define short-term and long-term career goals in cybersecurity, including skill development, certifications, and role aspirations
- Implementation Steps: Create a timeline with specific actions to achieve the set goals, such as enrolling in training programs or networking events
- Monitoring Progress: Regularly assess and track progress towards career goals, evaluate successes and challenges, and adjust strategies as needed





Valcon Inc IIBA CCA Bootcamp

- Learn core concepts of Cybersecurity relevant for all career paths
- Understand the role of Business Analyst in a Cybersecurity settings
- Understand the risks organization's face in implementing and operating security solutions
- 4-5 sessions of online class with certified professional as instructors
- Prepare for the IIBA CCA certification with more than 300 practice questions



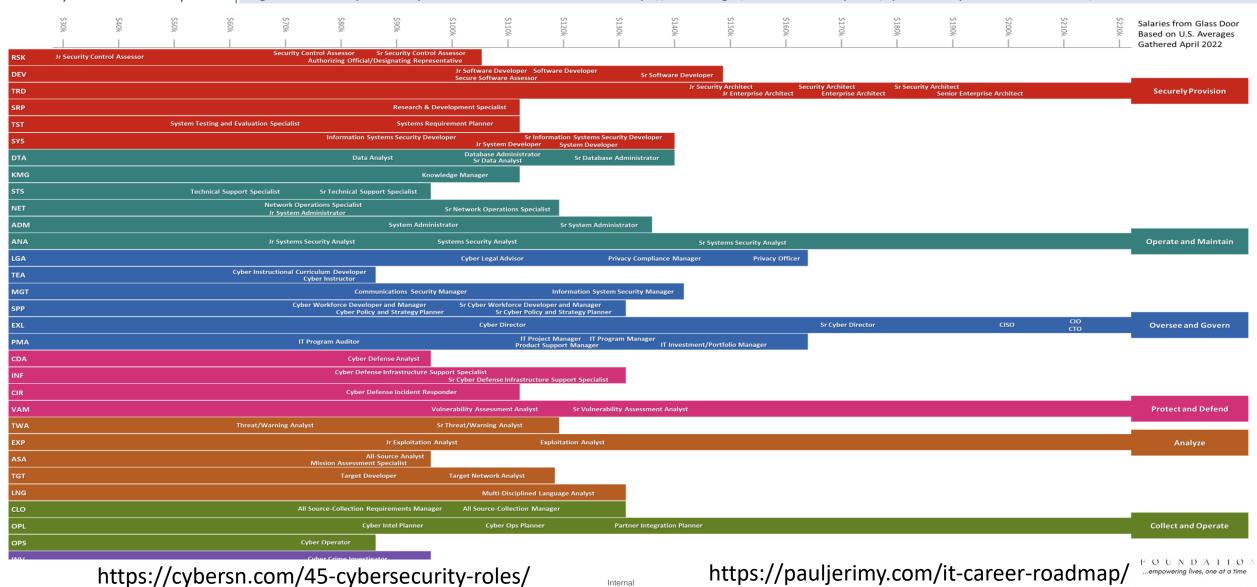


Q&A



Career & Salary In Cybersecurity – Appendix

Security Career Roadmap 2022 Aligned with NICE Cybersecurity Workforce Framework Work Roles: https://niccs.cisa.gov/workforce-development/cyber-security-workforce-framework/workroles



Interna