

### CYBERSECURITY CAREER GUIDE

A Comprehensive Playbook To Becoming A Cybersecurity Expert



# BECOME A PART OF THE CYBERSECURITY EPOCH

Over the last few years, technology has evolved at a rapid pace, enabling faster changes and processes. With our reliance on technology increasing by the day, an enormous amount of consumer and enterprise are stored digitally. This has also opened up new security challenges and requirements for cybersecurity professionals who are not only specialists but most current in terms of their technology expertise.

This has opened up numerous cybersecurity job opportunities and lead to rising demand for skilled security experts. Security professionals ahead of the curve will find it easy to keep pace with emerging job roles and 2020 is going to be an exciting time for professionals to stay current with tech trends and acquire new-age security skills.

Simplilearn's 2020 Cybersecurity Playbook is your complete guide to the skills required, career opportunities available and the ideal learning path needed to propel a career in the booming field of Cybersecurity. Our Playbook also provides the most trending technologies, the top companies that are hiring, and ways to jumpstart your career.



# SIGNS ARE THERE. ARE YOU WATCHING?



### The Future of Cybersecurity

Almost all critical systems in an organization are interconnected and driven by computer systems and networks. Our personal lives are reliant on virtual assistants, and as the number of devices grow, the chances of cyber attack and disruption also increases. With the advent of new cyber vulnerabilities in the recent years, there's a rising need for qualified cybersecurity experts.

### **Cybersecurity in Core Industry Sector**

Cybersecurity as a field is growing by leaps and bounds, creating different job roles in different sectors. According to the The Bureau of Labor Statistics, employment is expected to grow 32 percent from 2018 to 2028 in USA, which is much faster than other jobs. Cybersecurity is drastically adapting and evolving with new-age technologies, and gaining traction across various industries.

### Rising Demand for Cybersecurity Experts

As data breaches, hacking, and cybercrime reach new heights, organizations are increasingly relying on cybersecurity specialists to identify potential threats and protect valuable data. With the cybersecurity market expected to grow from \$152 billion in 2018 to \$248 billion by 2023, the field is poised to open up multiple opportunities for both beginners and experienced professionals across industries.



**Finance** 



Legal



Healthcare



Retail



Government



Manufacturing

## HOTTEST OPPORTUNITIES IN CYBERSECURITY

Cybersecurity professionals perform a wide range of roles, however, protecting online data from being compromised is their primary job responsibility. Due to the frequency of cyber attacks, careers in this field are varied and qualified professionals are in great demand.

### **Security Architect**

As a Security Architect, you'll design key infrastructures and robust security structures which are used to prevent malware attacks.

- → Perform vulnerability tests across networks, approve the installation of routers, VPN and firewalls, and also provide technical assistance to other security team members
- Acquire an in-depth understanding of various security protocols and cryptography to predict and prevent cyberattacks



The average yearly salary of a Security Architect is \$121,934

### **Security Engineer**

As a Security Engineer, you'll plan security measures to prevent cyber attacks in an organization, and protect its data and network.

- Design cybersecurity platforms for the organization, and plan and implement security measures
- Use programming (C++, Java, Python) and networking skills to analyze software vulnerabilities, and to identify malicious software



The average yearly salary of a Cybersecurity Engineer is \$94,929

### **Top 5 Must-know Cybersecurity Skills**

- Intrusion Detection
- Malware Analysis
- Programming
- Risk Analysis
- Security Analysis

### **Top Companies Hiring Cybersecurity Experts**



### MAP TO YOUR FUTURE

Learn about the different types of cyberattacks and the actions recommended for them



### Intro to Cybersecurity

Malware attack | Phishing attack | Password attack

Understand how the common operating systems work in order to install, test, and run applications in a system



### **Operating Systems**

Windows | Linux | Mac OS

> Study security protocols to know how data packets are transferred, and how computers are connected in a network



### **Understanding Protocols**

Routing | TCP | IP

Get the in-depth Networking skills required to understand and protect a network and its components



### Networking

IP | MAC address OSI Model Learn top programming languages for identifying vulnerabilities, malwares and viruses in a system



### Programming

JavaScript | Python/Perl | C/C++

Gain knowledge on the critical security approaches necessary to identify and prevent threats



### **Security Approaches**

Configuration of Firewalls | Vulnerability Analysis & Cryptography | Forensic Investigation Cybersecurity Architect

## LET THE LEARNING BEGIN

The growth of cybersecurity field has increased the demand for talented minds to help solve pressing business challenges faster and better. However, quitting a full-time job to go back to school isn't realistic for most people, and this is where Simplilearn comes into play. We're an online learning platform offering excellent courses with self-paced learning and live virtual classroom options available. With our highly-detailed course of study, you'll master everything you need to know to make a splash in these thriving fields. At Simplilearn, our industry experts deliver course content through a format that adapts to your pace of learning. Start one of our courses in Cybersecurity today and kickstart your career in the lucrative field of security and networking.

### The courses we offer:

- CISSP Certification
- CISA Certification
- CISM Training



### GET CERTIFIED. GET AHEAD.

Digital economy training | Driving innovation and accelerating careers

### **Our Latest and Significant Awards:**

Stevie® Award for Innovation in Customer Service Management, Planning & Practice
 Stevie® Award for Customer Service Success
 EC-Council ATC Circle of Excellence Award
 Top 20 Online Learning Library Companies (by Training Industry Magazine)



Founded in 2009, Simplilearn is one of the world's leading providers of online training for Digital Marketing, Cloud Computing, Project Management, Data Science, IT Service Management, Software Development and many other emerging technologies. Based in Bangalore, India, San Francisco, California, and Raleigh, North Carolina, Simplilearn partners with companies and individuals to address their unique needs, providing training and coaching to help working professionals meet their career goals. Simplilearn has enabled over 1 million professionals and companies across 150+ countries train, certify and upskill their employees.

Simplilearn's 400+ training courses are designed and updated by world-class industry experts. Their blended learning approach combines e-learning classes, instructor-led live virtual classrooms, applied learning projects, and 24/7 teaching assistance. More than 40 global training organizations have recognized Simplilearn as an official provider of certification training. The company has been named the 8th most influential education brand in the world by LinkedIn.

For more information, visit www.simplilearn.com.

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