



Sword & Shield
ENTERPRISE SECURITY



Career Paths In Cybersecurity

Introductions



Rob Ashcraft Sr. Technical Advisor

- 26-yrs in Information Technology
- 14-yrs in Information Security
- Held positions as Technician, IT Management, IT Sales
- Double Major: Computer Science / Mathematics

Work Hard , Play Hard!



Why Information Security?

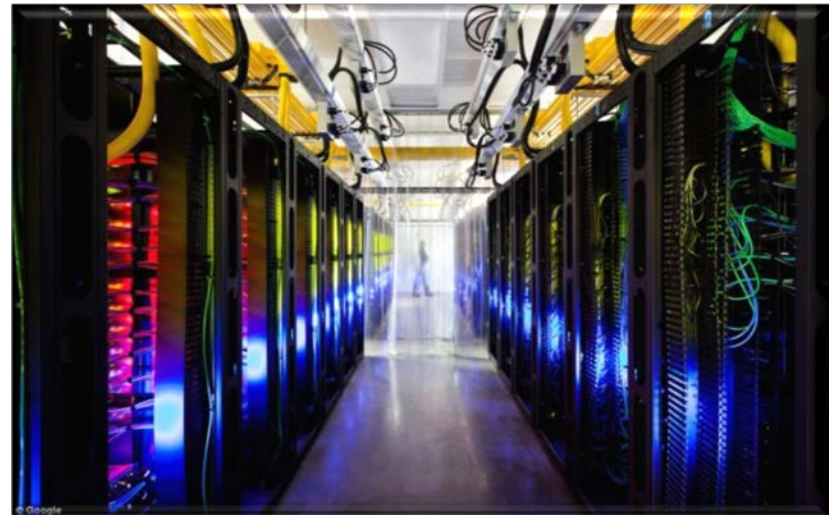
1. **According to CIO Magazine**, “experts in cybersecurity are among the most sought-after professionals in the tech sector, with demand for workers in that field outpacing other IT jobs by a wide margin.”
2. **Recent report cites** “The demand for Information Security professionals has grown 350% faster than any other position in IT.”
3. **There is a war going out there!** - The need for strong information security in organizations is paramount
4. **Show me da money** - U.S. security professionals to be \$116,000, or approximately \$55 per hour. That's nearly three times the national median income for full-time wage and salary workers, according to the Bureau of Labor Statistics.

Why Information Security?

We turn this...



... into this!



Career Paths Within Information Security

- 1. Administration / Engineering**
- 2. Audit / Risk Management**
- 3. Forensics / Ethical Hacking**
- 4. Management**
- 5. Pre-Sales Engineering & Account Management**



Security Administration & Engineering

Plans, coordinates, and monitors systems for the physical and electronic protection of data; Identifies and resolves security threats.

- Knowing how computers operate on the network
- Understanding the communication side of a network
- Computer Science & Security education / experience
- Network Admin / Engineering experience

Positions

Security Specialist

Information Security Analyst

Data Security Analyst

Cloud Engineers & Architects



Audit / Risk Management

Conducts methodical examinations of an organization's systems, platforms, and operating procedures to determine the security of its technical, physical, and administrative controls for best practices and compliance – These are MANDATORY assessments

- Have gained specialized training
- HIPAA, PCI, GLBA, FERPA, NERC-SIP,
- Understanding of frameworks, COBIT, NIST, ISO 27001, HI-Trust
- How does an audit list contrast to controls and policies in place
- Data Governance - Policy Dev and Enforcement

Positions

IT Auditor / Internal Audit

Privacy Officer

Compliance Officer

PCI Assessor (QSA)



Forensics & Ethical Hacking

Proactively finding vulnerabilities to strengthen security posture and/or extracts computer information for prosecuting cyber crime and improving data security of an organization.

- Good understanding how data transmit over network
- How data is stored
- How data is processed
- Coding vulnerabilities
- Assessing damage from breach

Positions

Security Analysts / Consultant

Forensics Analysts / Consultant

Penetration Tester / Ethical Hacker

Incident Responder

Expert Witness



Security Management

Management

Oversees the development and supervision of controls required to ensure an organization is effectively managing digital risks

- Team Leads
- Multiple Projects and Multiple People at a time
- Understanding the needs of “client” and appropriating the proper resources

Positions

Team Lead / Supervisor

Project Lead

Project Manager

Security Officer / ISO

Director of Security

CISO



Pre-Sales Engineering & Account Management

A lucrative and challenging career in working with organizations to understand their needs for information security and compliance and ability to map your services and products to their needs

- Technical background
- Good people skills
- Good organizational skills
- Success driven

Positions

Pre-Sales Engineer

Account Manager

Account Executive

Sales Management



What Are Hiring Managers Looking For?

- **Education / Certifications**
- **Technical Experience**
- **Real Knowledge / Aptitude**
- **Outside resources and personal initiatives to learn**
- **Communication Skills**
- **Written Skills**
- **Perceived Work Ethic**
- **Perceived Professionalism**
- **Perceived Dependability**
- **Passion**



Getting The Gig

- **First-Rate Resume(s)**
- **Online Job Boards**
- **Networking**
- **Research & Cold Call**
- **Follow-up**
- **Be Creative & Stand Out**
- **Practice Your Interview**



Never Stop Learning!

- GIAC Penetration Tester (GPEN)
- GIAC Assessing and Auditing Wireless Networks (GAWN)
- GIAC Web Application Penetration Tester (GWAPT)
- GIAC Certified Forensic Analyst (GCFA)
- Offensive Security Certified Professional (OSCP)
- GIAC Penetration Tester (GPEN)
- GIAC Web Application Penetration Tester (GWAPT)
- CREST Registered Penetration Tester (CRT Pen)
- GIAC Certified Incident Handler (GCIH)
- GIAC Certified Forensic Analyst (GCFA)
- GIAC Penetration Tester (GPEN)
- ISFCE Certified Computer Examiner (CCE)
- GIAC Web Application Penetration Tester (GWAPT)
- Comptia Security +
- Comptia Network +
- Certified Virtualization Expert 4.1 (CVE 4.1)
- Payment Card Industry (PCI) Qualified Security Assessor (QSA)
- GIAC Security Essentials (GSEC)
- GIAC Certified Incident Handler (GCIH)
- Project Management Professional (PMP)
- (ISC)2 Certified Information Systems Security Professional (CISSP)
- (ISC)2 Health Care Information Security & Privacy Practitioner (HCISSP)
- Payment Card Industry Qualified Security Assessor (QSA)
- ISACA Certified Information Systems Manager (CISM)
- (ISC)2 Systems Security Certified Practitioner (**SSCP**)
- CWSP Certified Wireless Security Professional
- EC-Council Certified Ethical Hacker
- EC-Council Certified Security Analyst





Golden Rules



- 1. Work harder than everyone!**
- 2. Show up early, stay late when needed**
- 3. Enjoy a challenge & be flexible**
- 4. Look for ways to improve (learn from failure)**
- 5. Be teachable**
- 6. Have a spirit of excellence**
- 7. Have a optimistic & positive attitude**
- 8. Align yourself with the Alphas (find good mentors)**
- 9. Be grateful, not a complainer**
- 10. Be a good negotiator**
- 11. Continue Your Education (NEVER STOP LEARNING!)**



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Thank you for your time!