

Cybersecurity

Everything you need to get started in c...
from basic to advanced topics and lear...

• Introduction to cybersecurity

- What is Cybersecurity?
- CIA triad
- Identification and Authentication, Authorization, and Accounting (AAA)
- Threat actors
- Malwares
- Social engineering

• Network

- Network Devices
- OSI model
- TCP/IP
- Protocols
- ip subnetting
- Network Segmentation
- Firewalls
- Proxies
- VPN
- Wireless Cryptographic Protocols

• Operating systems

- How operating systems work ?
- Windows 7 / 10
- Windows server
- Linux

• Web

- How the Web works ?
- http methods
- http headers
- Cookies
- HTTP response status codes

• Cryptographic

- Cryptosystem
- Key Exchange
- Symmetric Algorithms
- Asymmetric Algorithms
- Hashing
- Steganography

• Virtualization and Cloud Computing

- Virtualization
- Cloud Workloads
- Services Models
- Deployment Models
- Regions and Availability Zones
- Virtual Private Cloud (VPC)
- Security Groups & Policies

• Programing language

- php
- Python
- Javascript
- sql

• Shell Scripting

- BASH
- Powershell

• Vulnerabilities

- Web vulnerabilities
 - OWASP TOP 10
- Network vulnerabilities and attacks
- Zero-Day
- Third-Party Risks

• Penetration Testing

- What is Penetration Testing ?
- Types of Penetration Testing
- Testing Methodology
- Vulnerability Scans
- Threat Assessment

• Advanced

- Active directory attacks
- Reverse Engineering
- Buffer overflow
- Malware analysis

• Must know

- Cyber Kill Chain
- MITRE ATT&ck

• Blue team and Red team

- Red Team
 - Red Teaming Methodology
 - Red Teaming Tools
- Blue Team
 - SOC
 - SIEM
 - Incident response
 - Log management and analysis
 - Blue Team Tools

• Regulations, Standards, and Frameworks

- WHAT IS A CYBERSECURITY FRAMEWORK?
- The NIST Framework
- CIS Benchmarks
- ISO 27001 and ISO 27002
- PCI DSS
- HIPAA
- GDPR

Courses, Books and Cert Path

- Learning platforms
 - LetsDefend
 - Portswigger
 - TryHackMe
 - HackTheBox
- Youtube
 - 13Cubed
 - Computerphile
 - PwnFunction
 - LiveOverflow
 - The Cyber Mentor
 - HackerSploit
 - John Hammond
- Books
 - Cybersecurity For Dummies
 - Social Engineering: The Science of Human Hacking
 - The Art of Invisibility
 - Ghost In The Wires
 - Kali Linux Hacking: A Complete Step by Step Guide by Ethem Mining
 - The Hacker Playbook 3: Practical Guide to Penetration Testing
 - Penetration Testing: A Hands-On Introduction to Hacking
 - Practical Malware Analysis: The Hands-On Guide to Dissecting Malicious Software
- Certifications learning path
 - CCNA
 - CompTIA Network +
 - CompTIA security +
 - GIAC (GISF)
 - eJPT
 - OSCP