# SOC Analyst 3-Month Daily Roadmap (5 Hrs/Day)

## ■ Month 1 – Foundations (Networking, Linux, Security Basics)

■ Goal: Build strong IT + cybersecurity fundamentals.

#### Week 1 - Networking Basics

Day 1-2: Learn OSI model, TCP/IP, ports & protocols (HTTP, DNS, SMTP, FTP, SSH)

Day 3: Study firewalls, VPNs, IDS/IPS basics

Day 4: Packet analysis intro with Wireshark (capture HTTP/HTTPS traffic)

Day 5: Networking lab (ping, traceroute, netstat, nmap basics)

Day 6: Review & practice (quiz + flashcards)

Day 7: Write a 1-page summary of what you learned (portfolio start)

#### Week 2 - Linux & Windows Basics

Day 8-9: Linux commands (file system, grep, find, ps, chmod, networking tools)

Day 10: User management & permissions

Day 11: Windows basics (Event Viewer, PowerShell, Task Manager, registry)

Day 12: Practice lab: set up Ubuntu + Windows VM

Day 13: Simulate login attempts, check logs in Linux & Windows

Day 14: Document commands + screenshots in portfolio

#### Week 3 – Cybersecurity Fundamentals (Security+)

Day 15: CIA triad, threats, malware types

Day 16: Phishing, ransomware, DDoS, SQL injection basics

Day 17: Authentication methods (MFA, Kerberos, SAML, OAuth)

Day 18: Risk management (vulnerabilities, exploits, mitigation)

Day 19: Incident response lifecycle (NIST framework)

Day 20: Review with flashcards (Quizlet/Anki)

Day 21: Lab: Simulate brute-force login, detect in logs

## Week 4 - Intro to SOC & Tools

Day 22: What is a SOC? Roles (Tier 1–3 analysts)

Day 23: SIEM introduction (Splunk, ELK, QRadar)

Day 24: Install Splunk free edition, add test logs

Day 25: Splunk queries (SPL basics)

Day 26: SIEM use cases (failed logins, suspicious IPs)

Day 27: TryHackMe "SOC Fundamentals" module

Day 28: Document findings in portfolio

### ■ Month 2 - SOC Skills & Hands-On Practice

■ Goal: Learn SOC workflows + SIEM tools + detection skills.

## Week 5 – SIEM & Log Analysis

Day 29: Splunk hands-on (indexing logs, search queries)

Day 30: Detect brute force attempts with Splunk

Day 31: Install ELK Stack (Elasticsearch, Kibana, Logstash)

Day 32: Practice queries in Kibana

Day 33: Compare Splunk vs ELK usage

Day 34: Blue Team Labs (basic log challenges)

Day 35: Document a SOC investigation case

### Week 6 - Threats & Detection

Day 36: Malware types (worms, trojans, spyware)

- Day 37: Common attacker techniques (MITRE ATT&CK; basics)
- Day 38: Hands-on: detect port scan logs with SIEM
- Day 39: Detect phishing attempts with SIEM (email logs)
- Day 40: Detect privilege escalation attempts
- Day 41: TryHackMe "SOC Level 1 Threat Intelligence"
- Day 42: Write report: "How I detected suspicious activity with Splunk"

## Week 7 - Incident Response

Day 43: Phases of incident response (Preparation  $\rightarrow$  Detection  $\rightarrow$  Containment  $\rightarrow$  Eradication  $\rightarrow$ 

Recovery → Lessons)

- Day 44: Hands-on: Investigate brute force → block IP → report
- Day 45: Case study: WannaCry ransomware attack
- Day 46: TryHackMe "Blue Team Fundamentals"
- Day 47: Write mock incident report (Tier 1 SOC report style)
- Day 48: Review & quizzes
- Day 49: Portfolio update (include reports + screenshots)

## Week 8 - Real SOC Workflows

- Day 50: Learn ticketing systems (Jira, ServiceNow basics)
- Day 51: Escalation process (Tier 1  $\rightarrow$  Tier 2  $\rightarrow$  Tier 3)
- Day 52: Detect insider threats with SIEM logs
- Day 53: Threat intelligence feeds (AlienVault OTX, AbuseIPDB)
- Day 54: TryHackMe "Security Operations" module
- Day 55: Blue Team Labs (phishing + malware detection)
- Day 56: Review & create SOC analyst cheat sheet

#### ■ Month 3 - Advanced Practice & Job Prep

■ Goal: Master SOC workflows, build portfolio, prepare for interviews.

#### Week 9 - Threat Hunting Basics

- Day 57: Intro to threat hunting vs monitoring
- Day 58: MITRE ATT&CK; framework deep dive
- Day 59: Use ATT&CK; to map detection techniques in Splunk
- Day 60: Detect persistence techniques (scheduled tasks, registry changes)
- Day 61: Detect lateral movement attempts (SMB, RDP logs)
- Day 62: TryHackMe "Threat Hunting" room
- Day 63: Portfolio update

#### Week 10 - Forensics & Malware Basics

- Day 64: Digital forensics basics (disk, memory, network)
- Day 65: Tools (Autopsy, Volatility framework basics)
- Day 66: Simple memory analysis lab (detect malicious process)
- Day 67: Malware sandbox basics (Any.Run demo)
- Day 68: TryHackMe "Intro to Malware Analysis"
- Day 69: Document findings in portfolio
- Day 70: Review

### Week 11 - Mock SOC Environment

- Day 71: Set up SIEM + simulated attacks (Metasploitable VM)
- Day 72: Detect brute force → investigate logs
- Day 73: Detect phishing email attack
- Day 74: Detect data exfiltration attempt
- Day 75: Create incident reports for all 3 cases
- Day 76: TryHackMe "Blue Team SOC Level 1 Final"
- Day 77: Portfolio update

# Week 12 - Job Preparation & Applications

Day 78: Build SOC Analyst resume (highlight labs + skills)

Day 79: Create LinkedIn profile (connect with cybersecurity pros)

Day 80: Write SOC-specific GitHub/blog posts

Day 81: Practice SOC interview questions (technical + scenario-based)

Day 82: Apply for entry-level SOC Analyst jobs

Day 83: Mock interview with a friend/mentor

Day 84: Final review of tools (Splunk, ELK, Wireshark, TryHackMe reports)

Day 85–90: Continue applications + practice while waiting for responses