

# Ditikrushna Routray

## SOC Analyst

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## PROFILE

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**SOC Analyst** with **3+ years** of freelance experience in **network forensics, log analysis, Linux hardening**, and **incident triage** through self-built labs. Skilled in **packet analysis, auth log investigation**, and **security automation** using **Python** and **Bash**. Strong foundation in **threat detection** and **blue team operations**.

## SKILLS

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**Security Tools** - Wireshark - Nmap - Hydra - Fail2Ban

**Operating Systems** - Linux Mint - Ubuntu - Kali Linux - Windows Security Basics

**Scripting & Development** - Python - Bash - Git - GitHub - C++

**Networking** - TCP/IP - DNS - HTTP/HTTPS - SSH - DHCP

**Security Concepts** - Incident Response - IOC Analysis - MITRE ATT&CK

Authentication Security - File Integrity Monitoring

## PROJECTS

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**Project Nighthawk-SSH | SSH Attack Detection & Hardening Lab** 🔗 04/2026 – 04/2026

Executed **500+ SSH login attempts** using **Hydra** against Ubuntu 24.04 test VM in isolated lab- Investigated **50+ failed authentication events** in `/var/log/auth.log` using source IP and timeline analysis- Hardened SSH access using **ED25519 key-based authentication**- Configured **Fail2Ban + iptables** to automatically block repeated brute-force attempts- Documented **attack path, indicators, and remediation process**

**CyberDefenders HawkEye Lab | Malware Traffic Investigation** 🔗 04/2026 – 04/2026

Analyzed **4,000+ packets** involving malware infection and exfiltration traffic  
Identified compromised Windows host using **MAC address** and **DHCP evidence**  
Extracted malicious executable from **HTTP stream** for analysis  
Generated **MD5 IOC hash** for malware identification  
Decoded **Base64 SMTP credentials** to trace attacker communication  
Reconstructed attacker exfiltration workflow and documented findings

**SECURITY TOOL DEVELOPMENT** 03/2026 – 03/2026

**Sentinel-FIM | Linux File Integrity Monitor** |

Built Python-based **file integrity monitor** using watchdog API  
**Monitored 100+ files/directories** for changes and permission abuse  
Generated timestamped alerts for suspicious tampering

**Ironclad Relay | Secure Messaging Prototype** |

Developed encrypted messaging prototype using Python and C++  
Implemented **RSA-2048** identity verification  
Added secure **deletion for temporary sensitive data**

## CERTIFICATES

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- Google CyberSecurity 🔗

## EDUCATION

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**B.Sc. Computer Science | Utkal University | 2023 – 2026**

*Class 12 (Science) | CHSE Odisha | 2021 – 2023*