# Kunal Walavalkar

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Kunull

#### **SKILLS**

**Reverse Engineering** 

Python, Assembly, C

GNU Debugger, Cutter, Ghidra, Flare

VM, REMnux **Programming**  Windows, Active Directory, Linux

**Penetration Testing** 

**Digital Forensics** Autopsy, FTK Imager, Wireshark **Secure Code Review** 

Semgrep, Manual Secure code review,

SAST, DAST

**Vulnerability Assessment** 

OpenVAS, Nessus

# PROFESSIONAL EXPERIENCE

**Security Analyst** March 2025 - present

Cyware

• Designed and implemented agentic detection engineering workflows that autonomously analyzed threat advisories, TTPs, and IoCs to generate actionable Sigma, YARA, and Snort rules, significantly reducing detection engineering turnaround time.

Burpsuite, Nmap, Metasploit Framework,

- Developed an Al-powered agent that maps input technologies to corresponding MITRE ATT&CK TTPs, accelerating threat modeling and enhancing security coverage analysis.
- Developed a YARA-L parser and validation module to ensure syntactic and logical correctness of generated rules, improving deployment reliability and reducing false positives across detection pipelines.
- Developed and optimized internal security automation playbooks to streamline incident response workflows; improved efficiency by enhancing preexisting playbooks with enrichment logic, deduplication, and threshold tuning.

**Solution Engineer Intern** September 2024 - March 2025

Cyware

- Built scalable automation workflows using the AWS ecosystem to transform external threat intelligence into standardized formats, streamlining ingestion and reducing manual processing efforts.
- Delivered over custom integrations with third-party platforms, accelerating product readiness for strategic initiatives and enabling seamless interoperability within the security automation ecosystem.
- Developed advanced playbooks to onboard externally facing assets, detect exposed infrastructure, and identify secondary risk vectors, leading to improved threat visibility and faster incident response.
- Enhanced IOC processing by implementing defanging, deduplication, and automated ingestion mechanisms, reducing noise and improving the quality of threat data ingested into internal systems.
- Collaborated cross-functionally with engineering, product, and QA teams to validate and operationalize automation solutions, ensuring high reliability and alignment with business and operational goals.

**Digital Forensics Intern** March 2023 - July 2023

Cyber Secured India - India

• Learnt networking fundamentals.

- Performed web application penetration tests using Burpsuite.
- Used Autopsy for data recovery, analysis of evidence and reporting.

### **PROJECTS**

#### F.O.S.S.O.C - POC for an open-source Security Operations Centre which has automation capabilities.

- Set up an endpoint on a Windows using Wazuh host to detect incidents and respond to them.
- Leveraged TheHive's case management to store IOC and classify incident.
- Used Cortex analyzers to query relevant threat intelligence feeds with the stored IOC.
- Created an automation workflow within Shuffle that performs all of these steps without the need of human intervention.

# Kryptos - Cryptography toolkit that that includes various encoding schemes.

• Allows users encode or decode using a choice of five different cryptography algorithms.

#### Hexplorer - Command-Line hexdump utility written in C. &

• Allows developers and engineers to examine the raw bytes of a file or data stream.

## Write-ups - Collection of CTF write-ups. ⊗

• Includes writeups for: Binary Exploitation, Reverse Engineering, Web Exploitation, Network Forensics, System Forensics

### **CERTIFICATIONS**

eJPTv2 &, ICCA &, Fortinet NSE 1 &, CNSP &, CRTP

#### ASSIGNED CVES

CVE-2024-42717: SQL injection in Task Reminder System (/classes/Users.php?f=save).

CVE-2024-6807: @ Cross Site Scripting in Student Study Center Desk Management System (firstname, middlename, lastname, username).

CVE-2024-6802: @ SQL injection in Computer Laboratory Management System (/lms/classes/Master.php?f=save\_record).

CVE-2024-6732: Ø SQL injection in SourceCodester Student Study Center Desk Management System (/sscdms/classes/Users.php?f=save).

CVE-2024-6731: SQL injection in SourceCodester Student Study Center Desk Management System (/Master.php?f=save\_student).

CVE-2024-6729: Ø SQL injection in in SourceCodester Kortex Lite Advocate Office Management System (/control/add\_act.php).

#### **EDUCATION**