

SAMYUKTA KURIKALA

Boston, MA | samyuktakurikalawork@outlook.com | [Portfolio](#) | [LinkedIn](#) | [GitHub](#)

EDUCATION

Northeastern University

Master of Science in Cybersecurity | GPA: 3.75/4.00

Coursework: Information System Forensics, Network Security, Software Vulnerabilities & Securities

Boston, MA

Sep 2024 – Dec 2026

SRM Institute of Science and Technology

Bachelor of Technology in Computer Science | GPA: 9.21/10.00

Coursework: Computer Networks, Network Security, Operating Systems

Chennai, India

Sep 2020 – Jun 2024

TECHNICAL SKILLS & CERTIFICATIONS

Certifications: CompTIA Security+ | Google Cybersecurity Professional | ISC2 CC (Expected Nov 2025)

Security Tools: Wireshark, Splunk, Volatility, Autopsy, Burp Suite, Nmap, Metasploit

Languages & Scripting: Python, C, Bash, SQL, PowerShell

Frameworks: MITRE ATT&CK, OWASP Top 10, NIST CSF, NIST 800-53

Security Disciplines: Vulnerability Assessment, Web Application Security, Incident Response, Digital Forensics, Malware Analysis, Threat Intelligence, Security Monitoring

PROFESSIONAL EXPERIENCE

Defence Research and Development Organisation (DRDO)

Cybersecurity Project Intern

Dehradun, India - Remote

Aug 2023 – Nov 2023

- Developed secure video transmission system using Raspberry Pi with AES-256 encryption and custom frame-shuffling algorithms to prevent unauthorized viewing during wireless transmission
- Designed password-authenticated access control that rendered video indecipherable without proper credentials, preventing unauthorized access in security validation tests
- Established checksum-based integrity verification to detect tampering attempts and ensure video frames remained unmodified during transmission

MSN Laboratories

Network Security Intern

Hyderabad, India

Jun 2023 – Jul 2023

- Reviewed and updated firewall ACLs for internal applications, ensuring alignment with business requirements and security policies
- Improved firewall efficiency by analyzing firewall logs across 5 network zones, identifying obsolete rules and consolidating 15 redundant ACL entries
- Investigated security alerts using Wireshark packet analysis to distinguish legitimate traffic from threats, reducing false positive escalations

TECHNICAL PROJECTS

Enterprise SOC Environment | ELK Stack, Docker, MITRE ATT&CK

In Progress

- Deployed ELK Stack SIEM using Docker Compose with centralized log collection from 2 Linux endpoints for security monitoring and threat detection
- Developed Logstash correlation rules mapped to MITRE ATT&CK T1110 to detect brute force attacks by analyzing authentication logs and identifying failed login patterns

Secure Instant Messaging Application | Python, Cryptography, SRP, ECDH, AES-GCM

2025

- Built terminal-based encrypted chat system using SRP for authentication, ECDH key exchange for forward secrecy, and AES-256-GCM for message encryption and integrity verification
- Implemented TCP socket-based peer-to-peer messaging with HKDF session key derivation, rate limiting, and multi-user support for secure real-time communication

Information System Forensics Case Studies | Volatility, Wireshark, Autopsy, FTK Imager

2025

- Conducted 4 forensic investigations analyzing memory dumps, network traffic, and disk images to identify malicious processes, suspicious network connections, and indicators of compromise
- Applied forensic methodology using Volatility for memory analysis, Wireshark for packet inspection, and Autopsy for disk examination while maintaining formal chain-of-custody documentation

LEADERSHIP & COMMUNITY

Top 50 Globally – WiCyS Target Cyber Defense Challenge | **6th Place** – SimSpace Cyber Range Challenge

Head of Finance – null NEU Chapter | FOSS Contributor

Active Member: WiCyS, Boston Security Meetup, DEFCON Boston, Boston Hackers