

# CHARITHA JAYASINGHE

## CYBER SECURITY INTERN

+94 71 536 6314 | [charithnuwan054@gmail.com](mailto:charithnuwan054@gmail.com) | [charith-jayasinghe](https://www.linkedin.com/in/charith-jayasinghe)  
[charitha.jayasinghe](https://www.instagram.com/charitha.jayasinghe/) | [charithanuwan.me](http://charithanuwan.me)

### PROFESSIONAL SUMMARY

Cybersecurity focused Computer Science student with strong proficiency in Python and JavaScript, seeking an internship to gain hands-on cybersecurity experience. Passionate about network security, intrusion detection, and threat analysis with a demonstrated track record in building security tools and honeypots. Eager learner with strong problem-solving abilities and a commitment to advancing cybersecurity practices.

### TECHNICAL SKILLS

**Programming Languages:** Python, JavaScript, Bash

**Security Tools:** Wireshark, Nmap, Metasploit

**Operating Systems:** Kali Linux, Windows

**Networking:** TCP/IP, DNS, Firewalls

**Cloud Platforms:** Microsoft Azure

**Version Control:** Git, GitHub

**Web Technologies:** React, Node.js, Express.js, MongoDB

### EDUCATION

#### Bachelor of Science (Honors) in Computer Science and Technology

Uva Wellassa University of Sri Lanka

2022 – Present

CGPA: 3.36 / 4.0

### RESEARCH

#### GANs based data augmentation for multiclass intrusion detection system in AG-IOT

Nov 2025 – Present

- Developing a lightweight Generative Adversarial Network framework to generate high-quality, synthetic attack data.
- Implementing data augmentation pipeline to mitigate class imbalance in datasets and measure the IDS performances.

### PROJECTS

#### Building a Honeypot

*Technologies: Python, Docker, Ubuntu Server, Networking, Logging/Monitoring*

- Built a Python file-integrity monitoring script using cryptographic hashing to detect unauthorized changes.
- Implemented baseline snapshots and periodic checks to identify modified, added, or deleted files.
- Added logging and alerts for suspicious file alterations, tested on Linux for accuracy.

#### File Integrity Monitor

*Technologies: Python, Hashlib, SQLite, Linux, Logging*

- Developed a Python file-integrity monitoring tool using SHA-256 hashing to detect unauthorized changes.
- Implemented baseline creation, automated change detection, and continuous file monitoring.
- Added logging and alerting for suspicious modifications, tested on Linux for validation.

#### Active Directory Automation

*Technologies: PowerShell, Active Directory (AD DS), Windows Server, Automation Scripts*

- Automated user and group management in Active Directory using PowerShell scripts.
- Implemented bulk user creation, password resets, and OU organization workflows.
- Streamlined and tested AD administrative tasks on Windows Server for efficiency.

---

## Malware Analysis Lab

*Technologies: VirtualBox, Windows VM, Linux VM, Wireshark, Process Monitor, Cuckoo Sandbox, RE Tools*

- Built an isolated malware analysis lab with Windows and Linux VMs using VirtualBox.
  - Analyzed malware behavior and network activity with Wireshark, Process Monitor, and Cuckoo Sandbox.
  - Documented IoCs and attack patterns while practicing safe malware handling.
- 

## SOAR EDR Project

*Technologies: SOAR Platform, Python/PowerShell, SIEM Integration, EDR Tools*

- Designed and deployed EDR-to-SOAR integration to automate incident detection and response.
- Developed scripts and workflows for automated triage, alert enrichment, and playbook execution.
- Streamlined threat investigation by correlating endpoint telemetry, SIEM alerts, and automated remediation.

## CERTIFICATIONS

---

Junior Cybersecurity Analyst — Cisco Networking Academy — In Progress

Cybersecurity Essentials — Cisco Networking Academy — 2025

TryHackMe Cyber Security Pathway — In Progress

Python Essentials 1 — Cisco Networking Academy — 2025

Python Essentials 2 — Cisco Networking Academy — 2025

JavaScript Essentials 1 — Cisco Networking Academy — 2025

## SOFT SKILLS

---

Communication, Problem-Solving, Critical Thinking, Teamwork, Adaptability, Time Management

## ADDITIONAL INFORMATION

---

**Languages:** English (Advanced), Sinhala (Native)

**Professional Interests:** Network Security, Penetration Testing, Security Operations Center

## REFERENCES

---

### Ms. Chamalie Ellepola

Senior Lecturer

Department of Computer Science and Informatics

Uva Wellassa University

chamalie@uwu.ac.lk

+94 71 667 8993

### Mr. M. Janotheepan

Lecturer (Probationary)

Department of Computer Science and Informatics

Uva Wellassa University

janotheepan.m@uwu.ac.lk

+94 77 782 0899