

EDUCATION

Department of Computer Science & Engineering

University of Moratuwa

B.Sc. Eng. (Hons.), Cybersecurity stream

2024 – 2028 (expected)

- SGPA: 3.51
- Relevant coursework: Cyber Security, Computer Networks, Operating Systems, Data Structures & Algorithms, Theory of Computation, Software Engineering, IoT Devices & Applications, Linear Algebra.

Maliyadeva College, Kurunegala

G.C.E. Advanced Level – Physical Science stream

2009 – 2022

- 3A passes; Z-score: 2.2738.

PROJECTS

Involatile

Team of 3

Disk-encryption key recovery from RAM — Python, C

2026

- Recovers AES-128/256 full-disk-encryption keys from a memory image, locating candidates by the structure of the AES key schedule rather than by pattern-matching known formats.
- Reconstructs keys from cold-boot images degraded by memory decay, exploiting the one-directional nature of the decay and the redundancy of the key schedule.
- Built for forensic use: SHA-256 hashing on ingest and after processing, read-only handling of the image and evidence drive, and an append-only, timestamped chain-of-custody log.

Disaster Response Coordination Platform [GitHub](#)

Group project

Platform, Security & Integration

2026

- Owned the security layer of a multi-service system: Kong as the API gateway, Keycloak for identity and access, and HashiCorp Vault for secrets management.
- Ran the security and resilience testing pass — Trivy image scanning, OWASP ZAP, k6 load tests and chaos experiments.

Repz

Personal project

Strength-training tracker — React Native (Expo), Tailwind

2024

- Workout logging app for tracking sessions, exercise history and progression over time, built with two collaborators.
- Sole frontend developer: designed the interface in Figma and implemented it in React Native.

CTF & SECURITY PRACTICE

- **CryptX 2.0** — top 15 finalist, awarded distinction for outstanding skill and innovation; ICTS, University of Sri Jayewardenepura. 2026
- **CyberShield 4.0** — inter-university CTF with team *CyberSikko* representing University of Moratuwa; IEEE Computer Society, SLIIT. 2025
- **TryHackMe** — top 5% globally.
- Categories: web exploitation (SQLi, XXE, IDOR, JWT, prototype pollution), cryptography (AES-CTR, length-extension, lattice attacks on LCGs), digital forensics (PCAP, registry hives, steganography, disk imaging), binary exploitation and reverse engineering (Ghidra, pwntools), and OSINT.

SKILLS

Programming: C, Python, Java, JavaScript, Bash, SQL.

Security: Burp Suite, Wireshark, Ghidra, pwntools, Volatility, Autopsy, Nmap, John/Hashcat.

Infrastructure: Linux (Arch), Docker, Kubernetes, Kong, Keycloak, Vault, PostgreSQL, Git.

Languages: English (fluent), Sinhala (native).

ACTIVITIES

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INTERESTS

- **Console modding and hardware tinkering** — custom firmware, hardware modification and repair of games consoles and other embedded devices.
- **Linux customisation and self-hosting** — Arch Linux on a Wayland compositor; running and maintaining services on my own hardware.
- **All-Island Choral Competition** — 4th place (senior, 2020); 2nd and 3rd place (junior, 2019 and 2018) with Maliyadeva College.