

# Mridul Gharami

## PROFESSIONAL SUMMARY

*I am a second-year BSc Computer Science student seeking an internship to apply my knowledge and skills in cybersecurity and software development. I am eager to contribute to a dynamic team, enhance security measures, and support innovative development projects in a fast-paced environment.*

**Phone:** +918972202991      **Email:** gharamimridul@gmail.com      **Address:** South 24 Parganas, West Bengal, 743336, India      **Portfolio:** [https://mridul01154.github.io/MY\\_web/](https://mridul01154.github.io/MY_web/)

## EDUCATION

Bachelor of Science in Computer Science | 2023-2027  
Surendranath College, University of Calcutta, Kolkata

- **Relevant Coursework:** Data Structures and Algorithms, Ethical Hacking and Cybersecurity, Network Security, Encryption.  
GPA: 7.5/10 (~75%)

Higher Secondary (10+2) (WBCHSE) | 2020-2022  
J M Training, Joynagar, West Bengal  
Stream: Science

## Technical Skills

- **Programming Languages:**  
C, Python, Java, Bash, Batch, PowerShell, HTML/CSS
- **Frameworks:**  
NIST CSF, MITRE ATT&CK, ISO/IEC 27001, Zero Trust, CIS Controls, GDPR, PCI-DSS
- **Networking & Security:**  
Network Intrusion Detection (IDS), Packet Sniffing (Npcap, libpcap), Port Scanning Detection, SYN/UDP Flood Detection, Process Monitoring, Cryptography (AES, Fernet), SHA-256 Hashing
- **Operating Systems:**  
Windows System Programming (WinAPI, ToolHelp32), Linux, Shell Scripting, File Systems
- **Tools & Libraries:**  
Npcap, WinPcap, Tkinter (GUI), Git, Visual Studio, MinGW, Crypt32, ws2\_32, Vim, Burp Suite, Metasploit, Nessus, John the Ripper, Nikto, Aircrack-ng, Hydra, Splunk, Snort.
- **Other Skills:**  
CLI Tools Development, Multithreading (Windows Critical Sections), Secure File Management, Indexing, Concurrency Control

## PROJECTS

### Blockchain-Backed Messaging – Secure Messaging App

09.04.2025

- **Description:** Built a secure P2P messaging system leveraging blockchain principles and TLS encryption. Messages are cryptographically signed and transmitted over SSL sockets. The system uses a simple immutable log-like structure to ensure message authenticity and integrity.
- **Key Skills:** Python, Socket Programming, SSL/TLS, Blockchain Concepts, Cybersecurity
- **GitHub Repo:** <https://github.com/Mridul01154/Cyber/tree/main/BlockchainBacked%20Messaging>
- **Live Demo:** [https://mridul01154.github.io/MY\\_web/](https://mridul01154.github.io/MY_web/)

### EncryptedVault – File Encryption and Secure Storage

13.05.2025

- **Description:** Designed a graphical and command-line application for encrypting, decrypting, and securely managing sensitive files. Implemented password-based authentication and AES encryption using the Fernet protocol from the cryptography library. Integrated features like secure delete and master password reset.
- **Key Skills:** Python, Cryptography, GUI (Tkinter), CLI Tools, File Security
- **GitHub Repo:** <https://github.com/Mridul01154/Cyber/tree/main/EncryptedVault>
- **Live Demo:** [https://mridul01154.github.io/MY\\_web/](https://mridul01154.github.io/MY_web/)

### SENTINAL\_OS – Network Intrusion Detection and Process Monitoring System 05.06.2025

- **Description:** Developed a Windows-based Intrusion Detection System (IDS) and process monitor capable of real-time packet sniffing, blacklist-based IP and port monitoring, SYN/UDP flood detection, port scan detection, and malicious process detection (by name and SHA-256 hash). Integrated custom logging, configurable detection rules, and process monitoring with multi-threaded support.
- **Key Skills:** C, Windows API, Network Security, Packet Sniffing (Npcap), Process Monitoring, Multithreading, Hashing (SHA-256), System Programming.
- **GitHub Repo:** <https://github.com/Mridul01154/Cyber/tree/main/Keylogger>
- **Live Demo:** [https://mridul01154.github.io/MY\\_web/](https://mridul01154.github.io/MY_web/)

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## Certificates

- **IBM - Fundamentals of Encryption & Quantum-Safe Techniques**

Completed: 2025

Learned core encryption concepts including AES, RSA, and PKI, with an introduction to quantum-safe cryptography and its role in future-proofing data security.

- **Cisco - Introduction to Cybersecurity**

Completed: 2025

Gained foundational knowledge of cybersecurity principles, including threat types, attack vectors, security best practices, and the importance of confidentiality, integrity, and availability in digital environments.