

Amir Elcharif Mohammedi

Computer Security Student & Security Researcher

✉ amirmohammedihaam@email.com 📞 +213 7 96 97 33 17 📍 Algeria
🐙 github.com/AmirMohammedi 🌐 linkedin.com/in/amir-elcharif-mohammedi

Professional Summary

Driven fourth-year Computer Security student with hands-on expertise in offensive security, system administration, and network infrastructure. Proven track record in malware analysis, cryptographic implementation, and large-scale Linux deployment. Currently advancing skills through CCNA and BCAPT Security certifications. Seeking a challenging cybersecurity internship to leverage technical proficiency and contribute to real-world security operations.

Education

Engineer's Degree in Computer Security

Amar Telidji University, Laghouat, Algeria

Focus: Network Security, Cryptography, Malware Analysis, Penetration Testing

2022 – Present (4th Year)

Certifications & Professional Development

- **CCNA (Cisco Certified Network Associate)** — In Progress
- **BCAPT Security (Certified Advanced Penetration Tester)** — In Progress
- **Ubuntu Linux System Administration** — University Certification
- **Cybersecurity Fundamentals** — University Certification

Technical Competencies

- **Security & Offensive Tools:** Malware Analysis, Reverse Engineering Fundamentals, Keylogger Development, Encryption/Decryption, Secure Data Exfiltration, Stealth Techniques
- **Programming Languages:** C, C++, Java, JavaScript, PHP, Kotlin, SQL
- **Networking:** TCP/IP, Subnetting, VLAN Configuration, Routing & Switching, Network Troubleshooting, Protocol Analysis
- **Linux Administration:** Ubuntu, Linux Mint, System Deployment, Package Management, Service Configuration, Performance Optimization, Security Hardening
- **Web Development:** Node.js, Express.js, REST API Design, Backend Development
- **DevOps & Tools:** Git/GitHub, Docker Containerization, Nginx, Bash Scripting, Linux CLI

Security Research & Projects

Custom Keylogger Development & Analysis

- Engineered a sophisticated keylogger in C for educational security research and penetration testing scenarios
- Implemented AES encryption and LZMA compression to secure captured data and minimize detection
- Developed secure exfiltration mechanism with obfuscated network communication
- Applied anti-forensic techniques including process injection, persistence mechanisms, and runtime obfuscation
- Demonstrated understanding of Windows internals, memory manipulation, and stealth methodologies

AES Encryption Engine (C Implementation)

- Built complete AES-256 encryption/decryption system from scratch in C without external libraries
- Mastered cryptographic primitives: S-box transformations, MixColumns, AddRoundKey operations
- Optimized performance through efficient memory management and bitwise operations
- Validated implementation against NIST test vectors for cryptographic accuracy

System Administration & Infrastructure

Enterprise Linux Migration Initiative

- Led campus-wide migration of 50+ workstations from Windows to Linux Mint, improving security posture
- Diagnosed and resolved complex hardware compatibility issues, including GPU drivers and network adapters
- Automated deployment processes using shell scripts, reducing installation time by 60%
- Provided technical training and documentation to end-users, ensuring smooth transition
- Achieved 95% system uptime and significantly reduced malware incidents post-migration

Leadership & Community Engagement

- **Co-Leader** — UniByte Club: University IT club focused on technology and cybersecurity education
- **Security Specialist & Instructor** — StepDevs Club: Collaborative software development organization
- **Founder & Lead Technician** — Glados.zone: On-campus IT support service providing system repair, maintenance, and Linux consultation
- **Workshop Instructor:** Delivered hands-on training sessions on Linux fundamentals, cybersecurity awareness, and object-oriented programming to 50+ students

Areas of Interest

Penetration Testing • Malware Analysis & Reverse Engineering • Network Security • Cryptography • Linux System Hardening • Threat Intelligence • Red Team Operations

Languages

Arabic: Native — **English:** Intermediate (B1-B2) — **French:** Basic (A2)