Aziz Alghamdi

Cybersecurity & Criminal Justice Professional Located in Riyadh, Saudi Arabia

Education

2021–2025	Bachelor of Arts and Science in Computer Science , University of Colorado at Colorado Springs, GPA: 3.8/4.0 Emphasis on Cyberroqueity with a Minor in Criminal Justice
	Relevant Coursework: Digital Forensics, Network Security, Cryptography, Criminal Proce- dure, Cybercrime Investigation, Computer Systems Security, Evidence Law
	Member of Cybersecurity Club & Participant in National Cyber League competitions

Technical Skills

Security Digital Forensics, Incident Response, Penetration Testing, Network Security, Cryptography Programming Python, C++, Java, SQL, Bash, PowerShell Tools Wireshark, Metasploit, Nmap, Burp Suite, EnCase, Kali Linux, SIEM platforms

Systems Windows, Linux, Virtualization, Cloud Security, Network Architecture

Certifications

- 2024 Computer Forensics Specialist, GIAC
- 2023 Certified Ethical Hacker (CEH), EC-Council
- 2023 CompTIA Security+, CompTIA

Experience

2023–Present Research Assistant, University Cybersecurity Lab, Colorado Springs

- Developed tools for automated malware analysis and cryptocurrency transaction tracing
- Conducted research on tracking illicit cryptocurrency transactions while maintaining chain of custody
- O Co-authored research papers on digital evidence collection methodologies

Jun Cybersecurity Intern, XYZ Technologies, Colorado Springs

- 2023–Aug O Assisted security operations team in monitoring and analyzing potential security threats
 - 2023 O Conducted security audits on internal systems and documented findings
 - O Participated in vulnerability assessments and incident response simulations

Research

Publication "Forensic Analysis of Cryptocurrency-Based Ransomware Attacks: Criminal Justice and Technical Perspectives", Journal of Cybersecurity & Digital Forensics, 2024

Ongoing "Post-Quantum Cryptography Implementation Challenges: Security Implications for Critical Research Infrastructure", with Dr. Sarah Chen & Dr. Michael Rodriguez

Publication "Quantum Cryptography Implications for Digital Evidence in Criminal Investigations", International Journal of Digital Criminology, 2025

Projects

Digital Forensic Analysis Toolkit

Developed a comprehensive digital forensic toolkit that automates the collection and analysis of volatile and non-volatile data from compromised systems. The tool incorporates chain-of-custody documentation to ensure evidence admissibility in legal proceedings.

 \odot Technologies used: Python, Digital Forensics libraries, Memory Analysis frameworks

Cryptocurrency Transaction Tracer

Created a tool that visualizes and analyzes cryptocurrency transaction patterns to identify suspicious activities. The system employs machine learning algorithms to detect potential money laundering techniques and generates reports suitable for law enforcement investigations.

• Technologies used: Blockchain APIs, Machine Learning algorithms, Data Visualization frameworks

Zero-Trust Security Implementation Framework

Designed and implemented a zero-trust security architecture for a university research lab environment. The framework includes continuous authentication protocols, least privilege access controls, and comprehensive activity logging for security monitoring and incident response.

 \odot Technologies used: Network Security tools, Access Control systems, Security Architecture designs

Additional Activities

Participated in Capture The Flag (CTF) cybersecurity competitions Volunteer speaker at local high schools on cybersecurity awareness Member of ISACA (Information Systems Audit and Control Association)

Active contributor to open-source security tools on GitHub