

Profile

Cybersecurity researcher specializing in cryptocurrency forensics and post-quantum cryptography with 7 peer-reviewed publications. Proven success in developing digital forensic tools that reduced investigation time by 40% and increased threat detection by 85%. Seeking to leverage technical expertise in blockchain analysis, digital forensics, and criminal justice background to enhance organizational security.

Education

2021–2025 **Bachelor of Arts and Science in Computer Science**, *University of Colorado at Colorado Springs*, GPA: 3.9/4.0
Specialization: Cybersecurity with Minor in Criminal Justice • National Cyber League Competitor (Top 15%)

Research & Projects

- 2024–2025 **Digital Forensics Research**
- Authored 7 publications in Journal of Cybersecurity & Digital Forensics and International Journal of Digital Criminology
 - Developed cryptocurrency transaction framework reducing investigation time by 40%
 - Created ML-powered blockchain visualization tool with 85% accuracy in detecting money laundering patterns
 - Designed zero-trust security architecture reducing unauthorized access attempts by 90%
 - Conducted security awareness training for 200+ students, reducing phishing success by 75%
- 2023–2024 **Key Technical Projects**
- **Digital Forensic Toolkit:** Python-based automated forensic data collection with chain-of-custody
 - **Post-Quantum Implementation:** Security framework for critical infrastructure during quantum transition
 - **Blockchain Forensics Tool:** Identified patterns in cryptocurrency transactions for criminal prosecution

Technical Expertise

- Core Skills Digital Forensics • Incident Response • Penetration Testing • Blockchain Analysis • Post-Quantum Cryptography • Secure Coding • Threat Intelligence • Security Compliance
- Tools Wireshark • Metasploit • Kali Linux • Nmap • Burp Suite • SIEM Solutions • Autopsy • Memory Analysis Tools
- Programming Python (Advanced) • C++ • C# • SQL (Advanced) • PowerShell • Bash Scripting
- Compliance NIST Framework • ISO 27001 • GDPR • Chain-of-Custody • Criminal Evidence Procedures

Certifications & Professional Development

- 2025 **Google Cybersecurity Professional Certificate** — Comprehensive cybersecurity program covering security fundamentals, tools, and practical skills
- 2025 **Key Specializations:** Foundations of Cybersecurity • Assets, Threats, and Vulnerabilities • Automate Security Tasks with Python • Play It Safe: Manage Security Risks • Tools of the Trade: Linux and SQL
- 2024 **Professional Development:** DEF CON 32 Conference • Mountain Lions Cyber Club • International Journal of Digital Criminology Contributor

Selected Publications

- 2025 **Post-Quantum Cryptography Implementation Challenges:** Security Implications for Critical Infrastructure
- 2024 **Forensic Analysis of Cryptocurrency-Based Ransomware Attacks:** Criminal Justice and Technical Perspectives, Journal of Cybersecurity & Digital Forensics
- 2024 **Blockchain Forensics:** Challenges in Criminal Prosecution of Cryptocurrency-Related Crimes, International Journal of Digital Criminology