
EDUCATION

- **New York University (NYU)** New York, NY
Master of Science in Cybersecurity - GPA: 4.0 Fall 2025 – Present
- **University of Houston, C.T. Bauer College of Business** Houston, TX
Bachelor of Business Administration, Management Information Systems - GPA: 4.00 May 2024
 - Industry Certifications: Certified Red Team Operator (CRTO), CompTIA Security+, VHL Advanced+, OSCP in progress

PROFESSIONAL EXPERIENCE

- **Google** New York, NY
Red Team Consultant Dec 2025 – Present
Associate Red Team Consultant Dec 2023 – Nov 2025
 - **Red Team & Penetration Testing:** Conducted web application, internal, wireless, and physical penetration tests, identifying high-impact vulnerabilities and security gaps. Discovered and exploited critical issues such as SQL Injection, Command Injection, Directory Traversal, and Authorization Flaws. Led assumed breach engagements resulting in privilege escalation, lateral movement, and full domain compromise across hardened environments.
 - **Social Engineering & Physical Security:** Designed and executed custom phishing campaigns, successfully obtaining credentials from high-profile employees. Conducted physical security assessments, breaching multiple office locations undetected, gaining access to restricted areas, and exfiltrating company assets.
 - **Client Engagement & Communication:** Produced comprehensive reports and debrief documents detailing findings, risk impact, and remediation strategies. Delivered client presentations to security engineers, CISOs, and executive leadership. Managed stakeholder expectations and provided expert guidance on security improvements.
 - **Tool Development & Research:** Developed custom security tools including web applications and command-line utilities for credential decryption, network reconnaissance, and post-exploitation operations. Led research into QUIC-based covert C2 channels and forging tickets for SSO applications (Okta, O365). Authored internal methodology documentation and technical blog posts.
 - **Training & Certifications:** Achieved Certified Red Team Lead (CRTL) certification. Completed advanced trainings, including MalDev Academy, Windows Internals, Offensive Azure, and Evilginx Mastery.
- **IBM X-Force Red** Austin, TX
Penetration Testing Intern May 2023 – Aug 2023
 - Contributed to internal and external network penetration tests on Fortune 100 clients by scanning production environments, enumerating Active Directory escalation paths, and writing tooling to uncover potential LOLBINs.
 - Individually created a novel research project to emulate contact smart cards over a physical medium by building a soldered hardware bridge to establish communication and writing custom firmware to mimic smart card behavior.
 - Refined mobile, web app, network, social engineering, OSINT, and wireless testing methodologies by performing simulated phishing campaigns, on-site social engineering exercises, and various mock engagements.
 - Led mock client debrief calls to communicate penetration test findings and deliver strategic remediation guidance.
- **WithSecure** New York, NY
Security Consulting Intern June 2022 – Aug 2022
 - Contributed to web application, network, and hardware security assessments by fuzzing web interfaces, reviewing proprietary firmware code, and reverse engineering security mechanisms while developing bypasses.
 - Individually discovered and produced firm-published research on critical vulnerabilities in Megafis Bluetooth smart locks by reverse engineering the companion Android app resulting in 4 CVE advisories.
 - Trained in mobile and web app testing methodologies as well as technical report writing by completing capstone projects including mock assessments, reporting exercises, and executive debrief presentations.
 - Assisted consultants in the compilation and QA of assessment scopes and reports for Fortune 500 clients.

ACTIVITIES & PROJECTS

- **Ethical Hacking Club** University of Houston
President *Aug 2022 – May 2024*
 - Captain a team of Capture-The-Flag players by organizing, training, and preparing members for competitions.
 - Lead club efforts to build security-focused tools using Python by training and collaborating with members.
 - Host weekly Hack-The-Box sessions to develop member skills in offensive security methodologies and techniques.
- **Capture-The-Flag Competitions & Practical Training** Remote
Security Researcher / Participant *July 2020 – May 2024*
 - Learned to exploit network services, buffer overflows, and web applications by completing 4 learning paths, 72 rooms, 12 badges, and reaching level 0x9 [OMNI] on the TryHackMe cyber-training platform.
 - Built a successful testing methodology by compromising 47/47 machines of various difficulties including medium and Advanced+ level hosts in the Virtual Hacking Labs network without automated tools.
 - Competed in many CTF events including PicoCTF, BazaareBank CTF, MWR A.D, CanYouHack CTF and BazaareShop CTF.
 - Compiled a comprehensive write up on 10 VHL Advanced+ machines detailing steps taken to achieve full access.
 - Created open-source security tooling for bruteforcing network service authentication, cracking password hashes, monitoring keystrokes, encrypting/decrypting plaintext, and exploiting vulnerabilities in Bluetooth smart locks.
 - Completed adversary simulation courseware including Sektor7 Malware Development: Essentials and Intermediate.
- **Texas Dept. Of Information Resources Cybersecurity Project** GENB 3302
Team Lead *Feb 2021 – April 2021*
 - Trained team on fundamental security concepts to produce research delivered to over 1400 state employees.

AWARDS & SKILLS

- **Awards/Honors:** George Foundation Excellence Scholarship Award, UH Scholar's Award, Academic Excellence Award
- **Tools:** Linux, Active Directory, Python, AWS, Terraform, Metasploit, Wireshark, Burp Suite, SQLMap, Hashcat, Nmap
- **Languages:** Fluent in English; Conversational in Spanish, Urdu, and Hindi