



Experience

- **Praetorian Canada, Inc. | Lead Security Engineer** Oct 2024 - Present
 - Create assessment methodologies for cloud security testing service lines
 - Execute advanced cloud architecture security assessments
 - Mentor 2 junior engineers across product and cloud security verticals
 - Perform all responsibilities of a Senior Security Engineer
- **Praetorian Security, Inc. | Senior Security Engineer** Oct 2022 - Oct 2024
 - (At Praetorian Canada, Inc. since July 2024)
 - Published a AWS security-focussed blog post on ABAC in Lambda
 - Lead client interviews to understand and document details of client systems
 - Improved quality of assessment reports for the cloud security service line
 - Performed all responsibilities of a Security Engineer
- **Praetorian Security, Inc. | Security Engineer** Jul 2021 - Oct 2022
 - Performed solo and grouped (team of 2) security assessments for clients
 - Assessed security posture of mobile & web apps, cloud & network infrastructures
 - Prepared remediation plans for client systems to improve their security posture
- **Georgia Institute of Technology | Graduate TA** Jan 2020 - May 2021
 - Supervised course logistics for the course CS 6035/4235 - Intro to InfoSec
 - Prepared and graded examinations, assignments and quizzes for 200+ students
- **Google LLC | Security Engineer Intern** May 2020 - Aug 2020
 - Improved Fuzzbench to use single source of truth for benchmark container builds
 - Eliminate differences between standard and OSS-Fuzz benchmark integration
 - Integrated Manul fuzzer into Fuzzbench and wrote fuzz targets for 2 projects
- **Paramount Computer Systems | Security Intern** Aug 2018 - Jan 2019
 - Implemented a public-facing user-managed Secure File Server for client logs
 - Developed an Automated Vulnerability Assessment (VA) Bot
 - Delivered presentations on Ransomware awareness to healthcare practitioners

Core Skills

- Specialist in AWS architecture, security, and identity management
- Experienced in GCP, Azure, and Kubernetes security
- Proficient in supply chain (CI/CD) security across GitHub, Azure DevOps, CircleCI
- Proficient in Python, Bash, Go, and fundamentals of C, C++, java, and html/css/js/php
- Experienced with BurpSuite, OWASP Top 10, MASVS, and ASVS
- Experienced with Nmap, Nikto, Wireshark and basics of Hydra, GDB, Ghidra
- Experienced in Linux and fundamental Binary Exploitation techniques
- Knowledgeable in Computer Networking, Docker and build systems like Make



Education

- Georgia Institute of Technology | MS Cybersecurity (CGPA: 3.92) Aug 2019 - May 2021
- BITS Pilani | BE (Hons.) Computer Science (CGPA: 9.51/10.0) Aug 2015 - Jun 2019



Projects

- Containerized Security Toolkit** June 2023
 - Prepared a single Docker container with a collection of security tools
 - Devised workflow for security operations and image updates
- Analysis of Top 1 Million Domains** March 2020
 - Analyzed Majestic, Alexa, and Tranco lists over 30 days
 - Enumerated adoption over 3 security metrics - HTTP/2.0, IPv6, and TLS
- SubDextract - Sub-Domain Enumeration in Python** March 2020
 - Incorporated fast and reliable queries such as CT logs, SAN, DNS, etc.
 - Yields 10x speedup with decrement of 30% # subdomains compared to Sublist3r
- Cookie-Less secure Login** Jan 2019
 - Constructed login page without cookies using php and js constructs
 - Enforced security against SQLi, token/cookie based attacks, and replay attacks
- EncCat - Encrypted TCP Communication & File Sharing** May 2018
 - Emulated netcat with addition of a self-devised encryption scheme (salsa20 + rsa)
 - Yields 2x speedup for file transfers against cryptcat (twofish)
- Secure Voting on Blockchain (Ethereum Platform)** Apr 2018
 - Developed a secure voting system using node.js in a team of 2
 - Secured against replay attacks, session hijacking, XSS and CSRF using helmet.js



Accomplishments

- Dubai Police CTF Competition - Top 15 (Feb 2019)
- Hack in The Box (HiTB) Conference 2018, Dubai (Oct 2018)
Secured Rank 1 (UAE) in CTF (Professional Tier) competition under team "PCR_RT"
- IEEE Xtreme 11.0 : Programming competition (Oct 2017)
Secured Rank 1 (UAE), Rank 415 globally, under team "Optimise Prime"
- Developed prototype for a Healthcare activities Tracking System as part of team Medikate in NYU Abu Dhabi Hackathon 2019
- Participated in Global OSINT Search Party CTF by TraceLabs
- Solved numerous challenges from HackTheBox, VulnHub, Root-me and Pwnable



Extra-Curricular and Hobbies

- President and Founder of ACM The Hacker's Exclusive (HEX), at BITS Pilani
- Managed student placements as a Student Executive, Careers Division at BITS
- Tinkering with linux systems and security tools in my home lab
- Involvement in Security Conferences like BSides, HiTB
- Drumming, Photography, Digital Presence Design and Digital Concept Art

