

EXPERIENCE

Offensive Cybersecurity Consultant <i>RSM US LLP</i>	July 2021 – July 2024 Chicago, IL
<ul style="list-style-type: none">Performed red team, physical penetration, & network penetration testing as a technical lead of the close access and network exploitation teams.Mentored and led testing across web application, LLM/AI models, wireless network, social-engineering, cloud penetration testing, & configuration review assessments (AWS).Developed Python and Tmux automation framework to streamline network penetration testing organization & automating attacks; reducing start-up time by 85% for testers.Built modular scanner and reporting utility with Python and Docker to asynchronously run security tooling, including AWS configuration and code review, before consolidating output into standardized findings for reporting.Created a long-range RFID badge cloner using microcontroller devices with live credential reading through a Raspberry Pi wireless AP.Provided actionable remediation recommendations to client executives by delivering breach vector reports, enabling risk reduction & minimizing liability exposure for Fortune 10 technology companies, Fortune 500 financial institutions, & private clients.	
Security Software Engineering Intern <i>Synopsys</i>	May 2020 – Dec 2020 Bloomington, IN
<ul style="list-style-type: none">Automated AB-testing analysis through Python scripting report comparison, resulting in a 40% reduction in manager analysis time.Aggregated assessment data across Netsparker, AppScan, & BurpSuite through Jira & PostgreSQL, facilitating tracking of vulnerability trends.Designed & implemented an automated Tableau storyboard for senior managers & C-level to track trends across assessments.	
Penetration Security Consulting Intern <i>RSM US LLP</i>	Jun 2019 – Aug 2019 Chicago, IL
<ul style="list-style-type: none">Performed assisted network and web application penetration testing on client engagements.Developed Visual Basic macros & Python scripts for automating drafting/draft handling in Excel.Measured client compliance within NIST CSF assessments through direct communication with key stakeholders.	
Undergraduate Instructor: Intro. to Python Programming <i>Indiana University</i>	Sep 2018 – Jun 2020 Bloomington, IN
<ul style="list-style-type: none">Developed & maintained Python scripts to facilitate autograding of 200+ students.Led and assisted instruction for student groups of 20-45 through 55 exercises & labs regarding Python.	

EDUCATION

B.A. in Computer Science <i>Indiana University</i>	Aug 2017 – May 2021 Bloomington, IN
<i>Relevant Courses: Data Structures, Machine Learning, Relational Databases, Networking, C and Unix, Discrete Mathematics, Linear Algebra</i>	

TECHNICAL SKILLS

Certifications: PNPT, SANS GPCS, CompTIA CySA+, AWS Certified Cloud Practitioner
Security: Red Team, Internal/External Network, Web Application, Physical, & Social Engineering Penetration Testing
Languages: C/C++, Python, SQL, JavaScript, HTML/CSS, Unix Bash
Miscellaneous: AWS, Docker, Containerization, Linux, Tenable Nessus, Forklift-certified, Cobalt Strike

PROJECTS

Scylla	2023 – Present
Orchestration and automation tool developed using Bash and Python to support efficient and consistent internal network penetration testing.	
Charybdis	2023 – Present
Asynchronously scan and ingest data for static code and cloud account configuration testing- spitting out human-readable, highly customizable reporting templates.	
PassMasker	2024
Analyze a list of passwords using novel bucket-sort implementation to improve computation by 40% and provide an analysis of the the passwords into a mask ingestible to hashcat.	
Dockerized Metasploitable Lab	2021
Developed a docker network connecting a Kali OS to a Metasploitable2 OS to facilitate pen testing practice.	
Tor Browser Fingerprinting Research	2019
Measured comparative data sets to determine Tor browser's anti-fingerprinting capabilities and develop an algorithm to bypass controls.	

VOLUNTEERING

#HashtagLunchbag Volunteer	2022 – 2024
Packed lunches to help prepare meals for Pacific Garden Mission homeless shelter.	