

Sma Das

sma@sma-das.com | sma-das.com | www.linkedin.com/in/sma-das | 973-520-7331

EDUCATION

Rochester Institute of Technology

Bachelor of Science Cybersecurity

Dean's List: Top 3% of Students

Outstanding Undergraduate Scholar Award

January 2020 – December 2023

GPA: 3.9/4.0

2020 – 2023

2023

WORK EXPERIENCE

Google Cybersecurity Clinic, New York, NY – *Security Engineer*

Aug 2023 - Current

- Performed security testing including penetration testing and social engineering to uncover vulnerabilities.
- Develop and maintain secure coding standards and practices for the team, ensuring compliance with industry best practices and Google's security policies.
- Spearheaded the adoption of NIST-based security implementation to protect employee information and financial data

IBM, New York, NY – *Cybersecurity Engineer Intern*

May 2023 - Aug 2023

- Spearheaded collaborative efforts to revolutionize Python Federated ML models, ensuring secure and efficient training and inference on distributed data sources while safeguarding data privacy
- Innovated and contributed to the implementation of novel federated learning algorithms, resulting in a remarkable 78% improvement in performance and a remarkable 67% increase in efficiency for the models
- Responsible for the aggregation and cleansing of over 1,000,000 data points for use in IBM's Federated ML program designed to optimize and promote data privacy
- Python, Federated machine learning, PyTorch, Skorch, Java, TensorFlow, IBM Cloud

UniTech, Dubai, UAE – *Cloud Security Engineer Intern*

May 2022 - Dec 2022

- Automated 40+ AWS compliance checks and security monitoring tasks using Python SDK and AWS CLI scripts
- Communicated revamps in user permissions and access control for AWS using AWS IAM, enforcing security measures and limiting access to authorized personnel; reducing fraudulent accounts by 16%
- Pioneered the integration of vital AWS security services, such as AWS CloudTrail and Amazon GuardDuty, into applications, providing real-time monitoring and logging of critical security events; increasing coverage by 33%
- Performed weekly vulnerability assessments of cloud infrastructure and 12 services deployed on AWS and GCP

TryHackMe, London, UK – *Vulnerability Researcher & Penetration Tester Intern*

May 2021 - Dec 2021

- Performed reconnaissance on 50+ targets to create asset inventories and attack surface maps
- Executed 30+ penetration tests identifying over 100 vulnerabilities with high/critical severity
- Developed 10+ scripts and tools in Python to automate discovery and exploitation
- Led a team of developers in creating an internal vulnerability-reporting web application using Go, Java, and Python resulting in a 187% increase in reported bugs, security issues, and vulnerabilities
- Curated educational cybersecurity content consumed by over 1,000,000 platform members

ACTIVITIES & PROJECTS

CPTC: Collegiate Penetration Testing Competition

Aug 2023 - Current

- Intense cybersecurity challenge that simulates real-world computer infrastructure
- Achieved 2nd place out of 70 teams, showcasing exceptional leadership, technical prowess, and teamwork
- Developed and executed innovative penetration testing strategies, including network reconnaissance, exploitation, and post-exploitation techniques using the NIST-SP 800-115 framework for security testing

Project Shield Code Audit

Jan 2023 - May 2023

- Performed static and dynamic analysis on over 20K lines of RIT's opensource codebase to uncover security flaws
- Identified 30+ vulnerabilities including SQL injection, OS command injection, and cross-site scripting
- Documented findings in detail with steps to reproduce, severity ratings, and remediation advice
- Presented Top 10 high-severity findings to product leaders, influencing priority fixes before production release

CERTIFICATIONS

CompTIA Security+

TCM Practical Network Penetration Tester

SKILLS

Programming: Python, Java, Go, Git, Docker, Kubernetes, Rust, Powershell, C/C++, AWS, GCP, Bash Scripting, SDLC

Operating Systems: Windows, Windows Server, Unix, MacOS, RHEL, Ubuntu, Linux