Sasha Morgan

smorgcybsec@gmail.com

OBJECTIVE

Eager to contribute expertise in cyber security, data engineering, and AI, driving innovation and safeguarding digital ecosystems

EDUCATION

PhD, Computer Science, University of Virginia, August 2025 - Present
M.S, Cyber Security, New York University, May 2021
B.S. Computer Engineering, Virginia Tech, Minor Cyber Security, May 2019

HONORS

FedEx Entrepreneur Fund Grant Recipient, 2026
United Way of Charlottesville Alliance Grant Recipient, 2025
Verizon Digital Ready Grant Recipient, 2025
Etsy Creative Boost Initiative Grant Recipient, 2024
New York University Cyber Security Fellowship, 2019-2021
Virginia Tech Computer Engineering Leadership Award, 2019
WiCyS & Facebook Women in Cyber Security Scholarship, 2017, 2018, 2019
Facebook Grace Hopper Celebration Scholarship, 2018

COMPUTER SKILLS

C++/C#	Ontology	AI/MLOps
JAVA/Python	Openshift	DevSecOps
Cyber Security	Data Engineering	Industry Standardization

WORK EXPERIENCE

Data Engineer Sr, Recognized Technical Talent, Lockheed Martin, Herndon, Virginia, Sept 2023 – Present

- Developing software and a canonical data model for a common and standardized format for business and application process integrations across multiple organization utilizing the OAGIs Standards, Collibra, IBM Cloud Pak for Data, and Tibco. Integrating additional industry standards such as S-Series, QIF, IPC, IOF Ontology, and OAGIs standards.
- LM Data and AI Enablement Data Standards and Interoperability Team's Sr. DevSecOp Engineer and AI/ML Solutions Architect, building secure CI/CD pipelines, Kubernetes deployments, and integrating AI/ML into existing workflows. Serving as a peer mentor and advocate for various Jr engineers and interns. Serving as the team's technical reviewer on all DevSecOps, AI/ML, and data solutions.
- Architecting ontology based data solutions utilizing knowledge graphs, LLMs, and other ML/AI techniques.
- Contributing to the NIST Score Tool as a DevSecOps Engineer, member of NIST Score Tool and OAGI Cross Industry Boards.
- Awarded status of Recognized Technical Talent and Subject Matter Expert in Data Engineering in 2025

Data Engineer, Lockheed Martin, Herndon, Virginia, Oct 2020 – Sept 2023

Cyber Intelligence Analyst Associate, Lockheed Martin, Herndon, Virginia, August 2019 – Oct 2020

- Developing a secure continuous integration and delivery system and conducting security assessments on the containers and systems deployed to the Red Hat Openshift Container Platform. Developed windows prototype to exploit software vulnerabilities.

Software Engineering Intern, Lockheed Martin, Rockville, Maryland, May 2018 – January 2019

- Developing analytics software, web scrappers, and reconnaissance tools to collect data. Working to improve data analytics software used for reconnaissance and data engineering.

Web Security Technical Program Manager Intern, Facebook Inc and CodePath University, Blacksburg, Virginia, July 2017 – December 2018

- Received and lead training from CodePath and Facebook on Cyber Security, Social Engineering, Assessment and Monitoring, Securing and Attacking Input and Output, Foot printing and Forgery, Session Hijacking and Fixation, Encryption and User Authentication. Coordinated various university courses and sponsorship opportunities.

Back End Software Development Intern, TwinThread LLC, Charlottesville, Virginia, May 2017 – August 2017

- Developed SQL Databases, visualizations in JavaScript, machine learning technology, and worked on the Industrial Internet of Things sensor system which enabled the creation of a digital twin thread between a machine and the consumer.

PROJECTS

LLM Usage in SOC Centers Research, Graduate Research, University of Virginia, August 2025 – Present

- Researching how LLMs are used in Security Operation Centers based on various criteria including skill level and operations center role.

AI Security Forensic Observability Research, Graduate Research, University of Virginia, August 2025 – Present

- Researching LLM observability from a security first perspective.

NIST Score Tool MCP AI Integration, Open Source Contribution, December 2025

- Architected and developed an company agnostic Model Context Protocol integration for the NIST Score Tool allowing users to integrate any MCP compliant LLM with the Score Tool. Developed a series of tools, resources,

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and prompt that enable seamless integration with the existing score tool architecture. Presented this work to NIST, Land O'Lake, BAE System, Lockheed Martin, OAGIS, U.S Government, and other industry partners.

Cyber Fastrack United States Cyber Security Challenge, Virginia Tech, April 2019-Sept.2019

- Participated in the United States Capture the Flag, 1 of 543 out of 13,500 participants in the final round. Challenges included reverse engineering, forensics, web applications security, and network security problems.

Quantum Computing Research, Undergraduate Research, Virginia Tech Hume Center**,** August 2018- May 2019

- Investigating D-Wave quantum computer architecture and algorithms. Conduct mathematical analysis and modeling to form QUBO and develop algorithms and capabilities for quantum computing. Presented to the Virginia Tech National Security Symposium in 2019.

Security System Vulnerability Research, Undergraduate Research, Virginia Tech Hume Center, 2018

- Conducting undergraduate research on the security system of Traffic Cabinets for the Hume Research Center. Duties range from pentesting live targets, conducting literature reviews. Presented to the Virginia Tech National Security Symposium in 2018.

Embedded Software Design Team, Virginia Tech Electrical and Computer Engineering Department, 2018

- Designed an autonomous robot that plays Tic-Tac-Toe. The robot has the capability to draw the game symbols and navigate the gameboard using force sensitive sensors.

CERTIFICATIONS

U.S. Dept of Labor AIMLABS AI MLOps National Standards Apprenticeship, Issued December 2025
AI Fundamentals Practitioner Badge, Lockheed Martin/Credly**,** Issued October 2025
ML Ops Skills Badge, Lockheed Martin/Credly**,** Issued September 2025
AI Fundamentals Skills Badge, Lockheed Martin/Credly**,** Issued August 2025
Basic RCR Course, CITI Program**,** Issued August 2025
IRB-SBS Researcher Basic Course – No Prisoners, CITI Program**,** Issued August 2025
NSA-CAE Cyber Defense, National Security Agency, Issued August 2021

ACTIVITES

Intelligence Community Center for Academic Excellence (IC-CAE) Associates, 2017-2019
Women in Cyber Security, 2018-Present
National Society of Black Engineers, 2014-Present

LEADERSHIP

Hypatia and Galileo Residential Learning Community Leadership Team, 2015-2019
Virginia Tech College of Engineering Dean's Team, 2017- 2019
Virginia Tech Electrical and Computer Engineering Department Ambassador President, 2017- 2019