

Tyree M. Sloan

AI Engineer | Cloud Security Engineer | Research Engineer

Virginia Beach, VA | tyree@tyreesloan.com | linkedin.com/in/ty-cyber | github.com/tysloan-cyber

PROFESSIONAL SUMMARY

AI and cloud security engineer with hands-on experience across applied AI research, secure AWS architecture, and full-stack technology consulting. Conducted AI/cybersecurity research at the Air Force Research Laboratory, building Python middleware for behavioral AI analysis and secure, ephemeral cloud infrastructure. Brings several years of independent technology consulting experience translating business problems into practical, secure solutions. CompTIA Security+ CE certified, with an M.S. in Cybersecurity (4.0 GPA) and an MBA.

TECHNICAL SKILLS

Cloud: AWS (API Gateway, Lambda, EC2, EC2 Launch Templates, IAM, AWS SDK/Boto3), serverless & ephemeral compute architecture, cloud security, Google Cloud Platform (foundations)

AI & Automation: Prompt engineering and prompting strategy, AI-assisted software development, coding-agent workflows, validation of AI-generated code, large language model applications, workflow automation

Cybersecurity: Threat modeling, identity and access management, secure architecture design, risk management concepts, behavioral analysis, network security, secure software development, security reviews

Programming & Development: Python, TypeScript/JavaScript, FastAPI, REST APIs, JSON, Git/GitHub, Linux, Windows, Ollama

Consultation & Communication: Requirements discovery, solution recommendation, technical presentations, demonstrations, customer training and enablement, architecture diagrams, technical documentation, cross-functional collaboration

Customer & Business Platforms: Shopify, Wix, Etsy, Stripe, Square, PayPal, CRM systems, DNS/domain/email/web hosting administration, Adobe Creative Cloud

PROFESSIONAL EXPERIENCE

AI / Cybersecurity Research Intern -- Air Force Research Laboratory

Stipend Research Appointment | Rome, NY | May 2026 - Aug 2026

- Built a Python middleware prototype (UNMASK) that extracts measurable behavioral features from multi-turn conversations, producing structured output for downstream risk and intent evaluation.
- Designed the underlying behavioral taxonomy, feature definitions, and quantification approach; built and ran a benchmarking and validation pipeline across iterative build-test cycles.
- Built a Python terminal UI and an HTML educational portal for UNMASK, plus supporting technical diagrams, to make the research explorable for technical and non-technical audiences.
- Proposed and helped implement WHISPER's ephemeral-compute approach on AWS (API Gateway, Lambda, EC2, EC2 Launch Templates, IAM, Boto3), replacing embedded credentials with role-based authentication.
- Presented research findings to Department of Defense audiences and at a research symposium.

Graduate Research Assistant -- Norfolk State University

Stipend Research Appointment | Norfolk, VA | Aug 2024 - Aug 2025

- Conducted graduate cybersecurity research on phishing, adversary behavior, and applied AI within the university's Cybersecurity & AI Research Lab.
- Performed technical analysis of security threats and research products to surface relevant trends and emerging risks.
- Documented findings and delivered technical presentations to faculty and research collaborators.

IBM Master's Fellow

Research Fellowship | 2024 - 2025

- Competitively awarded fellowship supporting graduate research in artificial intelligence and cybersecurity at Norfolk State University, held concurrently with the Graduate Research Assistant appointment above.

Owner / Technology Solutions Consultant -- Vandy Production

Employment - Founder | Norfolk, VA | Sep 2020 - Present

- Own and operate a technology solutions business serving small businesses, clothing brands, contractors, and direct consumers, built through referrals, Etsy, and a company website.
- Run customer discovery from business problem to technical solution: clarify requirements, explain trade-offs, and recommend practical, cost-appropriate approaches.
- Design and implement websites, e-commerce, payment integrations, CRM configuration, and branding using Shopify, Wix, Etsy, Stripe, Square, PayPal, and Adobe Creative Cloud; administer domains, DNS, email, and hosting.
- Deliver post-launch training, troubleshooting, and maintenance; repeat engagements and ongoing relationships are the primary source of continuing work.

Sales & Service Representative -- Cintas

Employment | Portsmouth, VA | Nov 2023 - Oct 2024

- Managed approximately 120 commercial accounts (~\$1M annual revenue) with autonomy across service delivery, billing, credits, contracts, and retention.
- Contributed to approximately 2-5% incremental portfolio revenue growth by identifying unmet needs, expanding product adoption, and developing new sales opportunities.
- Closed an approximately \$2,000 custom order at an established municipal account by identifying an unmet branding need and developing the purchasing relationship directly.

EDUCATION

- M.S., Cybersecurity -- Norfolk State University, Norfolk, VA -- GPA 4.0/4.0
- Master of Business Administration -- Regent University, Virginia Beach, VA
- B.A., Political Science -- Norfolk State University, Norfolk, VA -- GPA 3.4/4.0, Cum Laude

CERTIFICATIONS & TRAINING

- CompTIA Security+ CE
- SANS SEC540: Cloud Security and DevSecOps Automation -- in progress, pursuing GIAC GCSA
- Google Cloud Platform Career Jumpstart

RESEARCH PRESENTATIONS

- UNMASK: Behavioral Middleware Framework for Concealed Intent Evaluation -- Author & Presenter, HBCU/MI Summer Research Program Symposium, Air Force Research Laboratory, Aug 2026 (abstract & poster).
- WHISPER: A Generalizable Framework for Securely Querying Public Data -- Co-Author & Presenter, HBCU/MI Summer Research Program Symposium, Air Force Research Laboratory, Aug 2026 (abstract & poster).