Yiguedan Philippe (Andy) Yaro

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EDUCATION

George Mason University, Honors College | Fairfax, VA — Expected Dec 2028
B.S. Cybersecurity Engineering, Minor in Data Science | GPA: 4.0/4.0 | Dean's List every semester
Coursework: Secure Software Engineering, Computer Networking, Operating Systems, Digital Systems, Discrete Mathematics

CERTIFICATIONS

AWS Certified Security – Specialty (Nov 2025) | AWS Certified AI Practitioner, AWS Certified Cloud Practitioner (May 2025)
Training: TryHackMe Attacking and Defending AWS, Hak5 Advanced DuckyScript, Google Foundations of Cybersecurity

TECHNICAL SKILLS

Programming: Python, Bash, JavaScript, SQL, C, MATLAB
AWS: IAM, STS, KMS, Cognito, Lambda, API Gateway, DynamoDB, S3, CloudFront, Route 53, EC2, CloudTrail, GuardDuty
Security: Threat modeling, least-privilege IAM, encryption, OAuth 2.0/JWT, CodeQL, Bandit, pip-audit, secret scanning
Infrastructure: Terraform, Docker, Kubernetes, GitHub Actions, Linux, Git, SQLite, PostgreSQL, pytest, Tableau
Languages: French (native), English (fluent)

EXPERIENCE

Future City Fellow | DiscoverE and UL Research Institutes, GMU team, Fairfax, VA — Feb 2026 – Oct 2026
- Built EV-SIENT, the 5-student team's platform for siting public EV chargers in Fairfax City, Fairfax County and Prince William County; it models 12 sites with Erlang-C queueing, discrete-event simulation and lifecycle costs.
- Deployed the study site and an in-browser planner (Python model run with Pyodide) on private S3 behind CloudFront with origin access control; the planner enforces HTTPS, TLS 1.2+ and a Content Security Policy.
- Added integrity checks: a SHA-256 hash chain over every data table so each published number traces to its inputs, hash-pinned dependencies for release builds, and a 41-gate verification script that CI runs.

Research Intern, Cloud Computing | InternPass Research Internship, Remote — Jun 2025 – Jul 2025
- Containerized a Python API with Docker and deployed it to the team's RKE2 Kubernetes cluster on AWS EC2.
- Built a serverless photo-check API on Lambda, API Gateway and Amazon Rekognition, defined in Terraform.

Teaching Assistant and Learning Assistant | George Mason University, Fairfax, VA — Aug 2025 – Present
- Coached 80 students in Python as a CS TA (Fall 2025); guide 90+ students in math recitations as a Learning Assistant.

PROJECTS

Secure Data Hub | Multi-account AWS architecture for client PII — Nov 2025 – Aug 2026
- Isolated client PII in its own AWS account, reachable only via an STS role with read access to one DynamoDB table.
- Caught a silent credential bug: unless handed the assumed role's session, the DynamoDB Encryption SDK makes KMS calls as the Lambda's own role, bypassing the account boundary.
- Took the tenant ID from a verified Cognito JWT claim, never from client input; in Terraform, made that claim immutable and limited KMS key use with a kms:ViaService condition.

Provalume | Memory for AI coding agents that trusts only verified facts, published on PyPI — Jul 2026 – Present
- Designed agent memory that promotes a fact only on evidence (a passing check, a non-author review, a landed commit), exposes no delete or promotion tool to agents, and guards against memory poisoning.
- Wrote a 26-threat threat model and 18 architecture decision records, fixed two ReDoS bugs CodeQL flagged, and gated CI on CodeQL, Bandit and pip-audit; 775 tests pass, 354 of them security tests.

Orkestra | Runtime that coordinates several AI coding agents on one repository, published on PyPI — Jul 2026 – Sep 2026
- Ran each agent task in its own Git worktree on a deterministic asyncio scheduler; no agent can approve its own code.
- Redacted 20+ credential formats from persisted logs, events and reports; releases ship via GitHub OIDC trusted publishing.

AuditsMadeSimple | 1st place, AGA National Datathon 2026 (team of 5), Washington, D.C. — Dec 2025 – Feb 2026
- Built and deployed the team's public site on AWS S3 (8 pages with embedded Tableau dashboards), wrote its methodology appendix, and presented it at AGA's National Leadership Training.

Also built: CERFODES proposal platform (Argon2, MFA, ClamAV quarantine); Afterward (AWS Strands agents filling IRS forms); mcp-keynote (fixed AppleScript injection); Cloud Resume Challenge (multi-account AWS, DNSSEC); NFC Cartridges (Flipper Zero app in C); Tableau MCP server; local-ai-orchestrator (offline LLM agents); Outbreak Detective (epidemic modeling lab)

HONORS & ACTIVITIES

- AI agent red-teaming competitions (Sep 2026): CrowdStrike Agents of Chaos; huntr and Palo Alto Networks Inside Job
- Honors College Peer Mentor | Lambda Sigma, Alpha Lambda Delta, NSCS honor societies | NSBE, African Student Association