Yawo Alphonse Siatitse

Software Engineer • Distributed Systems • Security & Identity • Cloud Platform

Seattle, WA • relocating to Toronto, ON (Canadian PR)

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Professional Summary

Software engineer with 6+ years building and owning secure, multi-tenant distributed systems on Azure across Microsoft's security organization, and shipping full-stack products independently end to end. Strengths span backend and distributed systems (event-driven microservices, fault-isolated pipelines, services at 4M+ submissions/day), identity and security engineering (OAuth 2.0 On-Behalf-Of, RBAC, Zero Trust, threat modeling, Secure SDLC, GDPR/PII handling), full-stack web (React/TypeScript on .NET and Go), and reliability and platform work (observability, CI/CD, incident response).

Technical Skills

Languages: C#, TypeScript, JavaScript, Python, Go, Java, C++, SQL, PowerShell

Backend & Frontend: .NET 8 / ASP.NET Core, EF Core, Go (Chi, sqlc), REST, OpenAPI, GraphQL, SignalR; ReactJS, Vite, Tailwind, shadcn/ui, Zustand

Distributed Systems & Cloud: Event-driven microservices, fault isolation, multi-tenant architecture, high-throughput pipelines; Azure, Container Apps, Service Fabric, APIM, Kubernetes, Cloudflare, Docker

Security & Identity: OAuth 2.0 / On-Behalf-Of, OpenID Connect, PKCE, JWT, RBAC, Zero Trust, Auth0, Microsoft Entra ID, Azure Key Vault, threat modeling, Secure SDLC, DevSecOps, GDPR/PII

Data & Observability: PostgreSQL, Cosmos DB, Redis, SQLite; OpenTelemetry, Serilog, Azure Application Insights; GitHub Actions, staged releases; Playwright, xUnit

AI: LLMs, LLM integration, AI-first development

Professional Experience

Microsoft Corporation

Software Engineer II — Microsoft Threat Protection Oct 2024 – Present

Seattle, WA

- Engineered a reusable, thread-safe OAuth 2.0 On-Behalf-Of (OBO) authentication library with distributed token caching that cut authentication overhead by 90% across tenant boundaries—now the standard integration framework for the platform's major tool migrations.
- Led the architecture and migration of Microsoft Defender for Office spam-rule authoring from a legacy desktop client to a cloud-native web platform, resolving a high-priority 11-month cross-team authentication bottleneck and protecting millions of Exchange Online enterprise seats.
- Directed the cross-tenant migration of the security-analyst platform into a compliance-hardened, Zero Trust Azure environment, isolating sensitive multi-tenant customer data and tightening access controls.
- Modernized legacy .NET 6 microservices to .NET 8 (LTS) and enforced centralized NuGet package management, eliminating version drift and restoring automated security-patching compliance across all active components.

Software Engineer II — Unified Security Intelligence May 2023 – Oct 2024

Vancouver, BC, Canada

- Built and launched an isolated, cloud-hosted remote browser for malware investigations. Authored threat models and data-exfiltration controls, migrated workloads off the corporate network, and eliminated 100% of recurring multi-region outages via crash-dump debugging.
- Led the re-platforming of a threat-sample ingestion service handling 4M+ submissions/day; added OpenTelemetry distributed tracing and single-click staged release pipelines, anchoring a detection-as-a-service platform saving $1–2M/month.
- Designed a configurable multi-tenant malware-detonation sandbox abstraction with role-based access control, enabling instant onboarding of new detonation environments while enforcing strict per-customer data isolation across tenant boundaries.

Software Engineer I — Cloud + AI Security Jun 2020 – May 2023

Redmond, WA

- Developed a diagnostic web application and sample-clustering system that lets analysts trace detection false positives and negatives, increasing analyst throughput 20x.
- Architected an extensible, modular role-based access control (RBAC) framework with automated access-request audit logging, providing least-privilege gatekeeping for high-risk security tooling.
- Re-architected a multi-source ingestion pipeline with per-source fault isolation, cutting new-source onboarding from a full code deploy to minutes and preventing upstream feed failures from disrupting independent streams.
- Cut sample-preview latency from over 20s to under 3s in the slowest region and improved global reliability ∼50% by decoupling a frontend-API dependency, adding a pre-processing engine, and integrating direct storage pipelines.
- Built a high-frequency artifact-replication service that mirrors ingested assets on arrival, boosting analysis-ready sample availability from <20% to ∼75%.
- Remediated secret-management gaps across 4 production services by adding Azure Key Vault and managed identities, refactoring toward dependency injection, and repairing the build/release pipeline for compliant artifact signing.

Mawussi-Tech — Independent Full-Stack & Forward-Deployed Projects Ongoing
Side projects — design, build, deploy end to end

- **UniAccess (admissions platform)** — multi-portal app (student/partner/admin) in React, TypeScript, .NET, PostgreSQL, Auth0, and Azure Blob Storage; built applications, document management, interviews, onboarding, and payment flows, and structured the Azure-hosted deployment.
- **Vibaze (social/events platform)** — ASP.NET Core 8 + PostgreSQL backend with Auth0/JWT, SignalR real-time messaging, and Azure Blob media; GitHub Actions CI/CD, Docker on Azure Container Apps, and Serilog/OpenTelemetry/Application Insights observability; tested with xUnit, FluentAssertions, NSubstitute, and Playwright.
- **EventPilot (event planning)** — Go API (Chi, SQLite, sqlc, OpenAPI) with a React/TypeScript front end wired through generated clients; deployed via Cloudflare Pages and Tunnel, with scoped payment, messaging, and object-storage integrations.

Morgan Stanley — Summer Technology Analyst (Full-Stack) Jun 2018 – Aug 2018
New York, NY

- Designed and shipped 2 full-stack features for a data-visualization web portal (saving admins ∼120 hours/year); wrote unit and integration tests with Cucumber and JUnit.

Research & Teaching

University of Rochester — Research Assistant & Teaching Assistant Jan 2018 – May 2020
Rochester, NY

- Prototyped a virtual-reality headset on an FPGA board under Prof. Yuhao Zhu, targeting reduced computation time and power consumption.
- Ran twice-weekly lab sessions and co-built 3 auto-graders for 135+ students in Data Structures & Algorithms and Computer Organization.

Publications

- **Energy-Efficient 360-Degree Video Rendering on FPGA via Algorithm-Architecture Co-Design** — co-author, ACM/SIGDA International Symposium on Field-Programmable Gate Arrays (FPGA 2020).

Education

- **Graduate Certificate in Cybersecurity** — Johns Hopkins University (May 2026).
- **B.S. Computer Science, High Distinction** — University of Rochester (May 2020). Dean's List; National Society of Collegiate Scholars.

Leadership, Service & Languages

- Cross-team subject-matter expert for the security-analyst platform and browser-isolation tooling; mentor to teammates; Microsoft technical interviewer.
- Volunteering: National Society of Black Engineers, CS Peer Tutoring, BUILD-in-a-Box, Young People Who Care.
- Languages: Ewe, French, English (fluent); Spanish (basic).