

AKEEM MCKENZIE

Software & AI Engineer | Cybersecurity | Open-Source Author

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PROFESSIONAL SUMMARY

Full-stack Software & AI Engineer with 6+ years building production systems across cybersecurity, data intelligence, and mobile platforms. Proven track record shipping enterprise security tooling, autonomous AI agents, and independent SaaS products — with open-source libraries published on PyPI and the VS Code Marketplace. IEEE member pursuing an M.S. in Data Science (May 2026). Deep expertise in Python, React, Django, and cloud-native architectures (AWS/Azure).

PROFESSIONAL EXPERIENCE

Software Engineer | OnDefend

May 2022 – Present

Jacksonville, FL

- Architected and built the Blindspot simulation builder — a red team attack simulation platform used in national security assessments and by major healthcare enterprises, now adopted by 10+ companies.
- Designed AI-powered simulation creation assistants using GPT models via OpenAI API, automating PowerShell generation logic and structured context injection, accelerating analyst workflows significantly.
- Built a RAG-based data intelligence engine and security-gap recommendation system, containerized with Docker and deployed via AWS CodePipeline for scalable, automated inference.
- Developed a high-performance Node.js report generation microservice, reducing report creation time from 60 seconds to under 6 seconds — a 90% improvement.
- Built a robust validation engine for enterprise security endpoints including Microsoft Defender, CrowdStrike, and SentinelOne; refactored backend logic into modular infrastructure, improving processing speed by 30%.
- Engineered scalable React components (Sankey diagram visualizations, dynamic grid systems, scheduling interfaces) integrated with Django templates, boosting user engagement by 40%.
- Developed a C# microservice for campaign orchestration and implemented a CI/CD pipeline in Azure, automating end-to-end deployment.
- Embedded Auth0 for secure authentication and built REST APIs enabling seamless third-party service integration.

Software Engineer | NLP Logix

Jan 2022 – May 2022

Jacksonville, FL

- Integrated EMR (Electronic Medical Records) systems using Python-based RPAs, increasing system efficiency and accuracy by 30%.
- Led R&D on image-recognition RPA systems, reducing manual data-entry labor by 25%.
- Resolved platform-wide bugs and hotfixes in Python, cutting system downtime by 50% and support requests by 30%.

Software Engineer | Suddath Companies

Apr 2021 – Dec 2021

Jacksonville, FL

- Delivered bug fixes and feature enhancements across web platforms in C# and Angular, reducing downtime by 30% and increasing system stability by 25%.
- Implemented API changes and new web features under Agile Scrum, resulting in a 20% increase in customer satisfaction ratings.

Software Engineer | University of North Florida

Apr 2020 – Apr 2021

Jacksonville, FL

- Built backend systems in C# with Angular CRUD operations and REST API endpoints.
- Developed a Python desktop application that reduced data processing time by 50% and automated PowerShell scripts cutting manual labor by 40%.
- Created a Canvas-integrated CSV comparison tool for faculty, streamlining grading workflows and improving data analysis efficiency.
- Built ETL packages improving data accuracy by 30% and reducing processing time by 25%.

Jacksonville, FL

- Planned and executed a full SharePoint 2016 → 2019 enterprise migration with minimal operational disruption.
- Automated data migration and ETL tasks with Python scripting, reducing manual effort and accelerating the transition timeline.

INDEPENDENT PROJECTS & OPEN SOURCE

LLMStrike <https://pypi.org/project/llmstrike> — Open-source adversarial security testing framework for LLM applications

- Published to PyPI; features 25 attack techniques and 175 adversarial payloads across 6 categories including prompt injection, jailbreak, and data exfiltration.
- Designed as a modular, extensible Python library enabling red teams to evaluate LLM application robustness.

FirstNotice <https://firstnotice.app> — SaaS platform for real estate investors monitoring Florida court filings

- Built full-stack with Next.js, FastAPI, and PostgreSQL; uses Playwright automation against the Duval County CORE portal.
- Integrated Clerk auth, Resend email, and APScheduler-based digest alerts for real-time filing notifications.

PatchForge <https://patchforge.dev> — Autonomous AI software engineering platform

- Converts Jira tickets into production-ready pull requests and auto-resolves production errors via Sentry webhook ingestion.
- RAG codebase context engine using Voyage AI embeddings and pgvector; Stripe token-based pricing with BYOK tier.

PaceTalk <https://apps.apple.com/us/app/pacetalk/id6760277752> — GPS real-time pace coaching app — live on the App Store

- Delivers real-time audio pace coaching with ElevenLabs voice packs during runs; built for iOS.

SigmaGen <https://pypi.org/project/sigmagen/> — AI-powered Sigma detection rule generator for threat hunting

- Automates generation of SIEM-compatible Sigma rules using LLM-based reasoning over threat intelligence.

Python Package Manager Pro <https://marketplace.visualstudio.com/items?itemName=AkeemMcKenzie.python-package-manager-pro> — VS Code extension for streamlined Python package management

- Published on the VS Code Marketplace; simplifies package discovery, installation, and environment management.

TECHNICAL SKILLS

Languages	Python (6 yrs) · JavaScript/TypeScript · Go · Java · C# · Node.js
Frontend	React · Next.js · Angular · jQuery · Django Templates
Backend	Django · FastAPI · Node.js · REST APIs · GraphQL
AI / ML	OpenAI API · LangChain · RAG · pgvector · Voyage AI · Scikit-learn
Databases	PostgreSQL · MySQL · SQLite · SQL Server · Redis
Cloud & DevOps	AWS · Azure · Docker · CI/CD · GitHub Actions · APScheduler
Security	Red Team Tooling · Adversarial ML · Endpoint Validation · Auth0
Mobile	React Native · iOS (App Store) · GPS & Location Services

EDUCATION

M.S. in Data Science — University of the Cumberland

Expected May 2026

Capstone: Unsupervised ML for bot detection via browser fingerprint anomaly detection (K-Means, BIRCH, Isolation Forest, LOF)

B.S. in Computer Science — University of North Florida

GPA: 3.6

CERTIFICATIONS & MEMBERSHIPS

- AWS Certified Cloud Practitioner
- IEEE Member