

ELTON SAKYI

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Backend-leaning full-stack software engineer with strong Java, PHP, API design, and secure-systems experience. Builds cloud-ready applications with authentication, RBAC, financial ledger systems, database-driven workflows, CI/CD, and AI-assisted engineering using Claude Code.

EDUCATION

B.S. Computer Science | Minor in Chemistry

Winthrop University, Rock Hill, SC

08/2024 – 05/2026

Associate in Science

University of South Carolina, Lancaster, SC

08/2022 – 04/2024

EXPERIENCE & SOFTWARE ENGINEERING PROJECTS

Camp Burnt Gin Application System

August 2025 – April 2026

Full-Stack Developer & Systems Lead Engineer | Laravel 12, React/TypeScript, MySQL, AWS EC2, REST APIs, RBAC

- Built a secure full-stack camp application platform for **250+ annual applicants**, delivering 4 role-based portals for Applicants, Admins, Super Admins, and Medical Providers across intake, medical review, document handling, messaging, reporting, and audit workflows.
- Modernized a manual process into a centralized digital system by designing **12+ workflow modules**, normalized MySQL schemas, Laravel REST controllers, protected routes, session-scoped RBAC, and React/TypeScript dashboards.
- Engineered a **HIPAA-conscious authorization model** for sensitive applicant and medical data using least-privilege access, Laravel policies, and audit-ready activity tracking across services, controllers, and role boundaries.

Wyncrest | Property Rental & Financial Workflow Platform

September 2025 – June 2026

Co-Founder & Sole Developer | Laravel 12, React/TypeScript, MySQL, RBAC, Ledger Systems, Payments, CI/CD

- Architected a Ghana-focused rental platform unifying the full tenancy lifecycle, listings, applications, contracts, rent ledger, payments, maintenance, and audit, across 4 role-scoped portals, consolidating business logic into **9 domain engines** validated by **1,080 passing automated tests**.
- Engineered an **append-only financial ledger** separating obligations, payments, allocations, adjustments, and reversals, with offline payment capture, duplicate-charge protection, and reconciliation that keeps every balance traceable to its source for dispute resolution.
- Implemented **capability-based RBAC with 10 granular admin permissions** enforced server-side via Laravel policies and gates, including last-super-admin protection, self-lockout prevention, transactional workflows, and audit records on every sensitive access change.

Pathfinder-X | Labor-Market & Education Intelligence Platform

February 2025 – Present

Founder & Full-Stack Developer | Laravel, MySQL, Java, REST APIs, BLS, O*NET, College Scorecard, Claude Code

- Architected an AI-assisted career and labor-market intelligence platform unifying **6 decision domains**: majors, careers, salaries, skills, job demand, and education outcomes into a queryable decision-support system.
- Integrated and normalized data from **3 federal sources** (BLS, O*NET, College Scorecard) by designing relational MySQL schemas, ingestion workflows, REST APIs, and analytics-ready models for cross-source comparison.
- Applied Java as a core systems-thinking language for object-oriented design, algorithmic reasoning, and reusable abstraction patterns, using Claude Code for accelerated implementation, refactoring, and architectural review.

FutureYou | LetsBuild 26.3 FinTech Hackathon

March 2026

Full-Stack Developer | React/Vite, Laravel/PHP, Financial Modeling, AI-Assisted Workflows

- Built and presented a personal-finance decision engine that **placed 4th of 18 teams**, modeling a decision → consequence → action loop through a React/Vite frontend and Laravel/PHP backend.
- Designed a **real-time slider-driven simulator** recalculating spending, debt, savings, and investment changes against debt-payoff timelines, goal completion dates, monthly budget feasibility, and compound-growth projections.
- Separated the system into a deterministic rule-based calculation layer and an AI explanation layer, keeping financial arithmetic verifiable while translating results into plain-language guidance under hackathon time constraints.

SKILLS

Core Languages & Data: Java, Python, PHP, TypeScript, JavaScript, HTML, SQL, MongoDB

Backend & API Engineering: Object-oriented programming, REST API design, authentication, RBAC, Laravel policies, service layers, audit logging, secure session handling, database migrations, Postman testing, backend workflow automation

Frameworks & Full-Stack: Laravel, React, Node.js, Express, Vite, MySQL Workbench, responsive frontend integration

Cloud, DevOps & AI-Assisted Engineering: AWS EC2, AWS RDS, IAM, Nginx, PHP-FPM, PM2, GitHub Actions CI/CD, Git, Linux, Vercel, Claude Code

ADDITIONAL INFORMATION

Research & Writing: Authored two CSCI 327 research papers at Winthrop University: *Digital Dependency: Cognitive and Neurological Consequences of Technology Use* (02/2025) and *Ethical Responsibilities of Technology Corporations in the Digital Age* (04/2025).

Languages: Native bilingual in English and Akan; working proficiency in German and French.

Memberships: USC Lancaster Chemistry Club; G.E.N.T.S.; Winthrop University Chemical Society; Winthrop Undergraduate Research Organization; Winthrop University Chess Club.