

## Kimathi Elikplim Sedegah

**Founder, Code Cadence | Full-Stack Developer | AI & RAG Enthusiast**

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[Portfolio](#) | [LinkedIn](#) | [GitHub /sedegah](#)

### Professional Summary

Innovative **Full Stack Developer** and **Founder of Code Cadence**, with a track record of building impactful technology solutions since the age of 19. Passionate about solving real-world problems using modern tools across **backend engineering, functional programming, and AI-powered systems**. Skilled in developing both **web platforms** and **low-level CLI utilities**, with multi-language fluency in **Java, Python, Haskell, Prolog, Zig, and TypeScript**. Currently pursuing a **B.Sc. in Computer Science at the University of Ghana** while actively publishing projects in the **AI/ML and developer tooling space**.

### Core Skills

- **Languages & Paradigms:** Java, Python, TypeScript/JavaScript, Haskell, Prolog, Zig, PHP, Shell, COBOL
- **Frameworks & Tools:** React, Next.js, Node.js, Streamlit, Supabase, Docker, Git/GitHub, CI/CD
- **AI/ML & Retrieval:** Retrieval-Augmented Generation (RAG), semantic search, embeddings, transformer modeling
- **Specializations:** Functional programming, system utilities, full-stack architecture, CLI tooling, Streamlit apps

### Projects & Technical Contributions

- **Neurelic – RAG-Powered Knowledge Assistant**  
A modular Retrieval-Augmented Generation system with semantic search, LLM-driven answers, multi-format doc support (JSON, text), and a Streamlit UI for interactive querying. ([GitHub](#))
- **NoCaptive** – Shell-based CLI to detect captive portals and verify open internet connectivity.
- **Nav-Accra** – Haskell CLI implementing Dijkstra's algorithm to compute shortest paths across Accra.
- **Sentinel** – Python tool for real-time DoS detection and mitigation on servers.
- **Cron-tool** – Java utility translating natural language schedules into cron expressions, with generated explanations and next-run predictions.
- **Tabulyst** – Haskell tool for inspecting, filtering, and auto-generating SQL schemas from CSV data.

- **TuneTrainer** – Real-time pitch detection utility in Python to identify tuning accuracy.
- **GitIntel** – Java-based GitHub analytics tool showing non-mutual followers and network insights.
- **ZigScan** – Zig-written CLI scanner that detects suspicious Unicode characters in code, optimized for VS Code integration.
- **TimeTableGen** – Prolog-based engine generating conflict-free university timetables with customizable exports (CSV/HTML).
- **SysVerge** – Java system analyzer using OSHI to display current OS and hardware performance metrics.
- **Updevted** – React app aggregating developer news, GitHub trends, and career resources in a modern UI.
- **Sustainability Hub** – Open-source TypeScript platform mapping sustainability initiatives across communities.
- More projects on GitHub: [github.com/sedegah](https://github.com/sedegah)

## Professional Experience

### Founder & Project Coordinator – Code Cadence

Apr 2025 – Present | Accra, Ghana (Hybrid)

- Piloted developer-focused tech initiatives, including **Acadience**, a smart QR attendance system for academic use.
- Coordinated collaborative developer projects and community events via Code Cadence.

### Student Ambassador – STEM for Development

Apr 2025 – Present | Ghana

- Promoted STEM skills and digital development through workshops and tech events.

### Student Volunteer – Google Developers Group

Dec 2024 – Jan 2025

- Participated in AI/ML sessions using Anaconda, Kaggle, and Docker to develop hands-on ML capabilities.

## Education

## Bachelor of Science in Computer Science (*Expected 2027*)

University of Ghana

### Publications

- **Neurelic – Modular Retrieval-Augmented Generation Framework** (*Ready Tensor, Jul 2025*)  
Advanced RAG system delivering context-aware AI responses, modular architecture, semantic search, and integration with streamlit UI. Open-source under MIT License. ([app.readytensor.ai](https://app.readytensor.ai), [GitHub](#))

### Certifications

- Docker Essentials: A Developer Introduction – *Cognitive Class, 2025*
- Introduction to IoT and Digital Transformation – *Cisco Networking Academy, 2025*
- CS120: Bitcoin for Developers – *Saylor Academy, 2025*
- CSS (Basics) – *HackerRank, 2025*
- Electronic Arts – Software Engineering Job Simulation – *Forage, 2025*
- Java Fundamentals – *HackerRank, 2025*
- Operating Systems Fundamentals – *Cisco Networking Academy, 2025*
- Principles of Agentic Code Development – *DeepLearning.AI, 2025*
- Ollama: Create Local LLM Applications – *Udemy, 2025*
- Python for Data Science and AI Development – *IBM SkillsBuild, 2024*

### Achievements

- Published a full-stack AI framework (**Neurelic**) with semantic search and LLM integration.
- Developed and deployed **15+ cross-domain tools**, from RAG systems to CLI utilities.
- Proficient in **functional programming** across Haskell, Prolog, and Zig.
- Earned GitHub recognitions: *Pull Shark, YOLO, Quickdraw*.

### References

Available upon request