

SHYAKA Aime

Software Engineer & AI Engineer

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SUMMARY

A Software Engineer and AI Engineer with hands-on experience building web applications, backend systems, and AI-powered tools. Skilled in NLP, LLMs, RAG systems, and model training, as well as full-stack web development using modern frameworks. Experienced in designing and delivering technical workshops on AI and machine learning. Passionate about applying emerging technologies to solve real-world problems in collaborative, fast-moving environments.

EXPERIENCE

Full Stack Developer

ITARA IQ

Sep 2024 — Feb 2026

Contributed to the development of dynamic applications with a focus on backend and frontend integration.

- Built and optimized APIs using Django and Django REST Framework, implementing secure authentication and efficient database operations.
- Developed interactive interfaces with React, ensuring seamless user experiences.
- Managed data with PostgreSQL, applied version control with Git, and worked in agile development cycles.

Junior AI Engineer

afriGen AI

Dec 2024 — Apr 2025

Worked as an AI Engineer, building AI-powered applications and designing and delivering NLP and LLM workshops for students.

- Built a Kinyarwanda-language chatbot using OpenAI API, LangChain, and RAG architecture with a vector database, enabling context-aware responses grounded in local knowledge.
- Developed a sentiment analysis system trained on the Sentiment140 Twitter dataset, implementing and comparing RNN, LSTM, and Transformer-based models across accuracy, F1 score, and inference speed.
- Built a multilingual name generator using a character-level RNN trained on names across multiple languages, generating contextually meaningful names from a given starting letter and language.
- Designed and delivered workshops on NLP and LLMs for students, covering tokenization, model architectures, fine-tuning, and practical AI tooling.
- Applied HuggingFace Transformers, vector databases, LangChain, and Python throughout project and workshop delivery.

Software Engineer

ANDELA

Feb 2024 — Sep 2024

Worked on building and maintaining scalable web applications, focusing on both backend and frontend development.

- Developed robust APIs and services using Express.js, Node.js, and TypeScript, with PostgreSQL and MongoDB databases, and integrated GraphQL for flexible data querying.
- Designed and implemented user interfaces with React, collaborating on UX/UI using Figma.
- Wrote unit and integration tests using Jest and Mocha/Chai, ensuring code reliability and maintainability.
- Utilized CI/CD pipelines, Git, and agile practices for efficient delivery and version control.
- Strengthened collaboration, communication, and problem-solving abilities through team projects and peer reviews.

Frontend Developer

NDINDA Design

Nov 2023 — Jan 2024

Redesigned NDINDA's website, improving page load speed by 35%. Added interactive features, increasing visitor engagement by 25% and making it easier for users to explore company services.

EDUCATION

Software Engineering

African Leadership University

SKILLS

- **AI & Machine Learning:** Python, LangChain, RAG, CAG, HuggingFace Transformers, OpenAI API, Anthropic API, Vector Databases (Chroma, Pinecone), Tokenization, Fine-tuning, RNN, LSTM, Transformer architectures, NLP
- **Backend:** Django, Django REST Framework, Node.js, Express.js, Python, GraphQL, Docker
- **Frontend:** React, HTML, CSS, JavaScript, TypeScript, Figma
- **Databases:** PostgreSQL, MongoDB
- **Tools & Practices:** Git, CI/CD, Agile Development
- **Soft Skills:** Problem-Solving, Communication, Team Collaboration, Technical Teaching

LANGUAGES

English (Fluent)

Kinyarwanda (Native)

CERTIFICATIONS AND LICENSES

JavaScript Algorithms and Data Structures — freeCodeCamp (2024)

PROJECTS

Kinyarwanda Chatbot

Python, LangChain, OpenAI API, RAG, Vector Database

Built a conversational AI assistant in Kinyarwanda using OpenAI's API and LangChain. Implemented a RAG pipeline with a vector database to ground responses in relevant local context, enabling accurate and culturally relevant answers beyond the base model's knowledge.

Sentiment Analysis — Twitter (Comparative Model Study)

Python, HuggingFace, RNN, LSTM, Transformers, Sentiment140 Dataset

Trained and evaluated three model architectures — RNN, LSTM, and Transformer-based — on the Sentiment140 Twitter dataset. Compared their performance across accuracy, F1 score, and inference speed to demonstrate the practical tradeoffs between model complexity and performance.

Multilingual Name Generator

Python, Character-level RNN

Built a character-level RNN trained on names from multiple languages. Given a starting letter and target language, the model generates contextually meaningful names, demonstrating sequence modeling and language-conditioned generation.

GeekMart – E-commerce Platform

Express.js, React, PostgreSQL, Stripe API, Node.js, Git

Developed a full-stack e-commerce platform with secure user authentication, product browsing, and cart management. Integrated Stripe API for seamless online payments. Implemented responsive UI with React and optimized backend with Express.js for efficient API handling.

[Live Demo](#) | [GitHub Repo](#)