

Kingsley Chinaka

Senior Software Engineer | AI Platform Engineer

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PROFESSIONAL SUMMARY

Senior Software Engineer with over 6+ years of experience building scalable full-stack platforms, distributed backend systems, and cloud-native applications using Node.js, TypeScript, React, AWS, and modern data technologies. Focused on AI Platform Engineering, combining production software architecture with Generative and Agentic AI, LLM-powered workflows, and autonomous task orchestration to build intelligent, reliable systems at scale.

PROFESSIONAL EXPERIENCE

Senior Software / AI Platform Engineer

MerchFunder | Maryland, USA (Contract)

The Merch Platform for Nonprofits, Charities & Religious Organizations

- Scales AI-powered fundraising for 500+ donors by building a NestJS/PostgreSQL backend, React frontend with OpenAI API.
- Directed the integration of core business logic across microservices on Google Cloud Platform, enhancing system responsiveness and scalability.
- Designed scalable APIs supporting secure payment workflows, nonprofit fundraising operations and donor communications, which increased conversion by 15% of 500 potential donors.
- Designed dynamic prompt templates and services to automate content generation, proposal drafting and structured outputs for dynamic AI-generated responses.
- Reduced release cycles by 10% through the integration of Anthropic API for automated PR reviews and CI suggestions.
- Collaborated directly with stakeholders to prioritize features and align technical implementation with business objectives.
- Drove a 60% increase in user engagement by architecting a responsive React frontend for an AI fundraising platform.
- Mentored engineers through code reviews, technical guidance, pair programming and architectural discussions.

Senior Software Engineer

Cova Inc. | Washington, DC

March 2022 – July 2023

Cova is the ultimate tool for organizing your wealth, keeping track of everything you own, and ensuring your loved ones find all your assets and portfolio in the event of an eventuality.

- Designed and maintained scalable backend services supporting enterprise applications.
- Refined deployment strategies, achieving a measurable 30% reduction in deployment times through meticulous process optimization.
- Implemented a robust CI/CD workflow on AWS utilizing GitHub Actions, enhancing containerization with Docker, leading to a scalable and efficient deployment process.
- Collaborated across engineering teams to architect, develop, test, and release production software.
- Architected and sustained a centralized API gateway in Node.js, harmonizing access to a suite of microservices, which significantly improved system latency by 60% and bolstered fault tolerance
- Built integrations with third-party APIs to synchronize business-critical data across multiple systems.
- Reduced API latency 30% by implementing GraphQL APIs and optimizing database operations
- Automated deployment pipelines using GitHub Actions and AWS, which Increased deployment frequency by 70%.

Senior Software Engineer

STEMuli | Dallas, TX

June 2020 – March 2022

Stemuli is a cutting-edge platform aimed at enhancing STEM education through interactive learning experiences and resources. The platform connects students, educators, and industry experts, fostering collaboration and empowering individuals in science, technology, engineering, and mathematics fields.

- Built highly scalable backend services supporting online learning and real-time collaboration / messaging using Socket.io
- Integrated Agora cloud recording with AWS S3 to provide secure storage for video sessions.
- Introduced a Background Job System with Node.js tools (e.g., BullMQ), to guarantee reliable asynchronous execution, background processing pipelines for scheduled and asynchronous jobs, which reduced cloud costs by 25%

- Implemented and maintained test-driven development practices using Jest and playwright
- Made a strategic decision to transition from a monolithic to a microservices architecture, implementing domain-driven design principles with Node.js services, reducing deployment time by 70% and enabling independent scaling of high-traffic services
- Modernized legacy Node.js applications by migrating JavaScript (ES5) to TypeScript.
- Optimized system performance with ECS containers running Node.js microservices, enhancing resource utilization for improved scalability.

Full Stack Developer

Printivo Ltd. | Lagos, Nigeria

March 2017 – May 2020

Printivo is an online platform that uses technology to help African businesses print marketing and business material with ease.

- Developed scalable e-commerce solutions serving thousands of customers.
- Partnered with product owners and business analysts to translate business requirements into software solutions.
- Optimized SQL queries and indexing strategies, significantly improving application performance.
- Designed secure REST APIs supporting mobile delivery applications.
- Built the Sell-on-Printivo marketplace feature enabling third-party merchants to sell custom products.
- Led migration of media assets from AWS S3 to Cloudinary, improving performance and reducing operational overhead.

SELECTED PROJECTS

PlugToCart AI Whatsapp Commerce for Small Businesses <https://plugtocart.ai>

- Built an AI-powered conversational commerce platform that enables businesses to automate product discovery, ordering, bookings, payments, and customer interactions across WhatsApp and other channels.
- Developed autonomous task orchestration workflows where AI agents interpret user intent, select and invoke tools, query inventory, calculate pricing, build carts, initiate payments, and coordinate multi-step business processes with minimal human intervention.
- Designed agentic workflows combining LLM reasoning, tool calling, APIs, webhooks, state machines, and deterministic business rules to reliably execute complex, multi-step commerce operations.

- Engineered solutions for key distributed-system challenges, including concurrent inventory updates, idempotent transactions, asynchronous processing, retries, timeouts, partial workflow failures, and state consistency across long-running conversations.
- Implemented safeguards around nondeterministic LLM behavior through structured outputs, tool validation, authorization boundaries, audit logging, human escalation, and deterministic transaction logic.
- Built scalable integrations connecting AI agents with product catalogs, inventory, payment providers, delivery workflows, and external business systems, enabling end-to-end automation from customer conversation through order fulfillment.

HireMule AI Career / Job Application Assistant <https://hiremule.com>

- Built an AI-powered career and job application assistant designed to help job seekers optimize resumes, write custom cover letters.
- Integrated OpenAI APIs with backend services to automate resume and cover letter generation.
- Designed prompt templates and structured outputs for consistent documents generation which are AI tailoring for specific job descriptions.
- LinkedIn optimization: AI headshot generation and profile analysis to increase recruiter visibility.

CORE COMPETENCIES

Backend Engineering: Node.js • TypeScript • NestJS • Express • PHP • Laravel • GraphQL • REST APIs • Microservices • Event-Driven Architecture

Frontend: React • Next.js • Redux • JavaScript

AI Engineering: OpenAI API • Anthropic Claude API • AI Agents • CoPilot • Prompt Engineering • Model Context Protocol (MCP) • Function Calling • Structured Outputs • AI Workflow Automation • LLM Integration

Cloud & DevOps: AWS • Google Cloud Platform • Docker • GitHub Actions • CI/CD • Datadog • Cloud Monitoring • Cloudflare

Observability: Datadog • CloudWatch • Logging • Sentry • New Relic

Databases & Caching: PostgreSQL • MongoDB • MySQL • MSSQL Server • Redis, RabbitMQ.

Engineering Practices: System Design • Distributed Systems • API Design • Test Automation • Agile • Technical Leadership • Mentoring • Code Reviews