

Patrick Ongeche

Senior Full-Stack Software Engineer

SUMMARY

- Full-Stack Software Engineer with 7+ years delivering end-to-end web applications using React, Next.js, Vue, NestJS, Django, and FastAPI.
- Expertise in database schema design and optimization with PostgreSQL, MongoDB, MySQL, and Redis.
- Proven experience integrating LLM APIs (OpenAI, Anthropic, LangChain) and building multi-agent AI automation systems reducing manual workload by 70%.
- Skilled in REST API, OAuth 2.0, JWT authentication, RBAC, multi-tenancy, and event-driven architectures.
- Strong background in DevOps with CI/CD, Docker, Kubernetes, AWS, GCP, and automated testing for scalable deployments.

TECHNICAL SKILLS

Main Technical Skills	JavaScript, TypeScript, Python, React, Next.js
AI Tools & Assistants	Claude
Programming Languages	JavaScript, PHP, Python, TypeScript
AI & Machine Learning	Claude, LangChain, n8n, OpenAI
JavaScript Libraries and Tools	Electron, Mongoose, React Hooks, Zod
JavaScript Frameworks	Express, Next.js, Node.js, React
Python Frameworks	FastAPI, Flask
Mobile Frameworks and Libraries	KeychainSwift
Security	RBAC
Databases & Management Systems / ORM	MongoDB, MySQL, PostgreSQL, Redis, SQL, SQLite
UI Frameworks, Libraries, and Browsers	CSS3, HTML5, Tailwind CSS
Cloud Platforms, Services & Computing	AWS, Azure, GCP, Netlify, Vercel, Zapier
Deployment, CI/CD & Administration	Active Directory, CD DevOps pipelines, CI/CD
QA, Test Automation, Security	Automated testing



Virtualization, Containers and Orchestration	Docker, Kubernetes
SDK / API and Integrations	FastAPI, GraphQL, JWT, OAuth, RESTful API, Stripe, Twilio
Version Control	Git, Github Actions
Mail / Network Protocols / Data transfer	JWT
Scripting and Command Line Interfaces	Make
Other Technical Skills	AD, Multi-threading, Rendering

WORK EXPERIENCE

Full-Stack Software Engineer - MAG (MAG CRM)

Duration: 2025 - Present

Summary:

- Development and maintenance of MAG CRM system covering leads, opportunities, work orders, quotes, invoicing, and reporting
- The CRM is designed to streamline customer relationship management and business operations

Responsibilities:

- Build and maintain backend with NestJS and frontend with Next.js/React.
- Design database schemas and queries for MongoDB and PostgreSQL.
- Implement authentication, RBAC, multi-tenancy, and event-driven scheduling.
- Integrate third-party systems such as ManyChat, Twilio, and Stripe via REST APIs and webhooks.
- Deliver frontend workflows including forms, validation, dashboards, charts, and PDF generation.
- Write automated tests and document architecture decisions.

Technologies: TypeScript, NestJS, Next.js, React, MongoDB, PostgreSQL, Tailwind CSS, JWT, Stripe, ManyChat, Twilio, REST APIs, Webhooks

Software Engineer (Contract) - BPOSeats (Cross-platform Desktop Applications with AI-assisted Workflow Automation)

Duration: January 2024 - May 2025

Summary:

- Development of cross-platform desktop applications featuring AI-assisted workflow automation to reduce manual effort in business processes
- The project involved integrating AI technologies to enhance operational efficiency

Responsibilities:

- Built Vue.js frontend and Python/Django backend business logic.



- Developed AI-assisted workflow automation features using LangChain and internal business data.

Technologies: Python, Django, Vue.js, LangChain, Electron

Full-Stack Software Developer - NetSpice (Internal and Customer-Facing Applications)

Duration: September 2023 - Present

Summary: Design and development of scalable internal and customer-facing applications across the full stack to support business operations and customer engagement.

Responsibilities:

- Designed and built applications using React, Node.js, and TypeScript.
- Led architecture decisions and code reviews.
- Translated business requirements into maintainable software.
- Troubleshoot and resolved issues from frontend to backend and deployment.

Technologies: React, Node.js, TypeScript, REST APIs, Distributed Systems

Software Developer - Devtom (Full-Stack Service Design and Development)

Duration: March 2022 - August 2023

Summary: Contributed to the design and development of full-stack services to support business applications, including mentoring and process optimization.

Responsibilities:

- Developed services using Vue.js, Node.js, Python/Django, and GraphQL.
- Mentored and onboarded team members.
- Optimized delivery processes.

Technologies: GraphQL, Node.js, Python/Django, Vue.js

Full-Stack Software Engineer - Toshe Ujenzi Works Limited (Toshe Ujenzi Works Limited Full-Stack Website Development)

Summary:

- Designed and built a full 10-page marketing website including a custom brand system and asset recreation, later rebuilt using Next.js to improve framework compatibility and performance

Responsibilities:

- Designed and developed a marketing website using React, Vite, and Tailwind CSS.
- Rebuilt and shipped a Next.js version of the website addressing framework-specific differences.

Technologies: React, Vite, Tailwind CSS, Next.js



Full-Stack Software Engineer (Multi-Agent AI Operations Assistant)

Summary: Designed a multi-agent backend system for customer intake, scheduling, quoting, and escalation using RAG pipelines on embeddings and vector databases, integrated with CRMs and Twilio to automate operations.

Responsibilities:

- Designed backend multi-agent system with RAG pipelines and vector databases.
- Integrated system via tool calling with CRMs and Twilio.

Technologies: RAG Pipelines, Embeddings, Vector Databases, Tool Calling, CRMs, Twilio

EDUCATION

- **Bachelor of Science in Computer and Software Engineering**
2015 - 2019

CERTIFICATION

- **Advanced Web Development with React**
LinkedIn
2020
- **Frontend Certificate**
TestDome
- **Andela Training**
2017

