

Agyenim Boateng Barfi

Senior Fullstack Engineer · Distributed Systems & AI-Powered Products

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PROFILE

Senior Fullstack Engineer with 10+ years of experience building and shipping end-to-end products — from interactive frontends to distributed backend systems and AI-powered platforms. Equally comfortable architecting APIs, designing data pipelines, and delivering polished user-facing features with React and Vue. Founder of Searchly AI, an AI-native e-commerce search platform. Strong depth in PHP, Python, TypeScript, and Node.js with a track record of owning complex systems from architecture through to production.

TECHNICAL SKILLS

Languages	PHP, Python, TypeScript, JavaScript, Node.js
Frontend	React, Vue.js, Inertia.js, Tailwind CSS
Backend & APIs	Laravel, REST API design, Webhook architecture, FFmpeg
Search & Data	OpenSearch, Elasticsearch, Vector Embeddings, Redis, Kafka, RabbitMQ
Cloud & Infra	AWS (EC2, S3, SQS), Docker, Supervisor, CI/CD
AI / ML	OpenAI API, Prompt Engineering, PDF text extraction, Semantic Search
Languages (spoken)	English (fluent), German (elementary)

EXPERIENCE

Senior Fullstack Engineer

Axcera · Remote · Contract · Dec 2024 – Present

- Checkout Infrastructure Rebuild: Identified WooCommerce as a critical scaling bottleneck and architected a replacement e-commerce service from scratch in TypeScript and Node.js, giving the team full ownership and control over the checkout and order lifecycle.
- Payment Integrations: Integrated Paytiko and Paysafe as payment providers within the new service, replacing fragile plugin-based payment handling with a clean, maintainable API layer.

Lead Product Engineer & Founder

Searchly AI · Accra, Ghana · Jan 2025 – Present

- Built and launched an AI-powered semantic search engine for e-commerce platforms, using vector embeddings and OpenSearch to enable natural language product discovery.
- Designed the full data ingestion pipeline with Laravel, RabbitMQ, and Python, handling real-time product indexing at scale across distributed queues.
- Owned the entire product lifecycle — backend architecture, Shopify plugin, frontend onboarding flow, and user documentation.

Senior Fullstack Engineer

64Robots · Remote · Jan 2022 – Jan 2025

- AI-Powered Listing Automation (FinanceLobby): Integrated OpenAI into the broker workflow to auto-generate draft property listings from Offering Memorandum PDFs — extracting document text as GPT context to pre-populate listing fields and eliminate manual data entry.
- Search Infrastructure: Integrated Elasticsearch to improve data retrieval accuracy and query performance across the platform's core search functionality.
- Payments & Webhooks: Built and maintained secure payment APIs and webhook infrastructure, improving transaction reliability and reducing failed payment incidents.

- **Logistics Automation:** Integrated UPS shipping APIs to automate label generation, removing manual effort from the fulfilment workflow.
- **Frontend Development:** Delivered client-facing features using React and Vue.js, working closely with design to ship polished, responsive user interfaces.
- **Engineering Quality:** Introduced code linting and automated testing pipelines, improving deployment confidence and reducing regression risk.

Fullstack Developer

Scopic Software · Remote · Sept 2018 – Dec 2021

- Designed and implemented an FFmpeg-based video transcoding service, significantly improving encoding speed and media processing reliability.
- Built and maintained client-facing web interfaces alongside backend services, delivering complete feature work across the full stack.
- Maintained and optimised legacy applications, resolving long-standing performance bottlenecks and ensuring consistent system uptime.

Fullstack Developer

Kudobuzz · Accra, Ghana · May 2015 – Aug 2018

- Built a high-performance product import engine supporting Shopify, BigCommerce, and WooCommerce, handling millions of records with improved accuracy and speed.
- Expanded social platform integrations from 2 to 6 (adding Yelp, Amazon, Etsy, and Google), broadening merchant reach and driving higher review engagement.
- Migrated a legacy PHP application to React, improving UI performance and long-term maintainability.
- Introduced automated testing practices that reduced post-release bugs and stabilised the release cycle.

OPEN SOURCE & PROJECTS

ElasticBridge

Open-source Laravel package that streamlines Elasticsearch integration for PHP applications with a clean, developer-friendly API. Available on Packagist.

Searchly AI · searchly.ai

AI-powered semantic search platform for e-commerce stores. Generates vector embeddings per product to enable natural language search — built from scratch as founder and sole engineer.

EDUCATION

BSc Computer Science · University for Development Studies, Ghana · 2010 – 2014