Jonathan Paul Katumba

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Experienced software developer with 15+ years in **Python**, **PHP**, **Node.js**, **NestJS**, **SvelteKit**, **and React**. Proven track record of building and launching impactful software in **health**, **education**, **eCommerce**, **and AI**. Contributed to teams that successfully entered markets, solved critical problems, and collectively raised over **\$700K** in funding. Passionate about developing **scalable**, **high-quality software** and driving innovation in fast-paced environments.

Skills

Languages: Java, Python, PHP, Javascript, Typescript, Dart, Go, SQL

Technologies and tools: AWS, GCP, Git & github, S3, Docker, VPS, Nestjs, Angular, Postgres, MySQL, Cronjobs, Laravel, Django, FAST APi, Nodejs, Sveltekit, React, Go gin, OpenAI, Gemini, Langchain, Milvus, Pinecone

Professional Experience

Software developer, Duka.bio (Kenya

- Reduced hosting and server costs by 50% by self hosting and managing services on multiple VPS
- Reduced development time from the projected 4 months to 6 weeks by implementing and integrating free open source software such as medusajs, logto and zenstack.
- Implemented payments using paystack which increased sales as abandoned carts reduced from 85% to 35% due to easy payment process.

Technologies used: Nestjs, Sveltekit, Postgres, React, Medusajs, Coolify, Cloudflare, Docker

Full stack engineer, theonline.farm (Uganda)

- Implemented farm management and accounting process for farm manager to reduce their dependence on hard copy record taking improving efficiency by 70%
- Implemented multi tenant system to manage and handle data of different farms respectively greatly reducing the tech infrastructure costs from projected \$2500 monthly to \$170

Technologies used: Nestjs, Sveltekit, Postgres, AWS, Paddle, Docker, OpenAI

Software developer, Hisabati.me (Kenya & Ghana)

- Engineered the backend technology achieving exceptional AI responsiveness with a low response latency of approximately 0.9 seconds including RAG retrievals making the chatbot easy to use
- Utilised LLMs to help students access Math tutoring by integrating with OpenAI making it for over 20,000 students to access a virtual math tutor using Whatsapp

Technologies used: Nestjs, React, Whatsapp Business API, Postgres, AWS, Twilio, Langchain, OpenAI

Senior Software engineer, Minute5 (Uganda)

- Implemented ecommerce platform from scratch which rewarded the team will page loading screen of 0.3 seconds
- Developed order prediction algorithms using AI and customer data to predict their next order which improved operations by 60% due to the reduced fulfillment time as orders were packed ahead of time

Technologies used: PHP, Python, Django, Laravel, MySQL, Tensorflow

Education

Brookes Oxford University, England (2021 - 2025)

BSc (Hons) in Applied Accounting

Meltwater Entrepreneurial School of Technology (2022 - 2023)

Software engineering & Entrepreneurship

Jan 2024 - Jul 2024

Aug 2024 - present

June 2023 - Sept 2023

Dec 2019 - Jan 2024

Awards and Certificates

- Member: Association of Chartered Certified Accountants
- Software entrepreneur award : MEST Africa
- Top 20 entrepreneur : Anzisha prize
- Winner MTN App challenge: MTN Uganda
- Software development training: Andela