

Cetric Okola

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Nairobi, Kenya

Summary

Experienced software engineer and technical leader with a track record of delivering scalable systems and AI-driven solutions. Skilled in leading cross-functional teams, driving product innovation, and integrating machine learning and NLP into real-world applications. Combines hands-on development expertise with strategic thinking to align technology with business goals.

Skills

Golang, Java, React.js, Vue.js, TypeScript, MySQL, PostgreSQL, MongoDB, Docker, Kubernetes, AWS, Google Cloud, system design and administration, hands-on expertise in REST/SOAP microservices, Apache Kafka, Rabbit MQ, Jenkins, Python & Python Libraries (OpenCV, Streamlit, NLP), and OpenAI Assistant APIs, Monorepos (NX)

Experience

Contract Lead Systems Architect.

Purple Elephant Ventures - Nairobi, Kenya | *July 2025 – Nov 2025*

- Led the architecture and development of **swoopafrika.com**, to come up with a scalable and performance-oriented system framework, which is future-compliant.
- Outlined the technical roadmap and system blueprint, based on which the development of the platform was oriented, the priorities of the functionality were identified, and the data modelling in the backend was found.
- Multi-tenant architecture Back-end services which are secure, based on the pattern of service communication, API endpoints, and written in modeled Node Js and postgresQL.
- The importations of those include cloud-native, containerized infrastructure, CI/CD pipelines and environment auto-infrastructuring that made deployments faster and engineering expenditures less.
- Technical advice on strategy planning of infrastructure cost and engineering advice on sustainable growth.
- Collaborated with product and business groups to change requirements into technical specifications.
- The ability to control the quality of the code, architectural integrity and maintainability to be sure of long-term stability and potential of expanding the code in a modular fashion.

Key Achievement

The platform foundation of Swoop Africa was put in place on a core basis under contract schedules that designed and implemented it to allow liberal product innovation and market preparedness.

Chief Technology Officer

TandaPay – Nairobi, Kenya | *Feb 2024 – May 2025*

Provided executive technology leadership for Tanda, focusing on product scalability, regulatory compliance, and AI integration across core financial services.

- Directed the end-to-end tech roadmap, aligning engineering efforts with product and business goals in the fintech ecosystem.
- Scaled infrastructure with microservices, Docker, and Kubernetes on Google Cloud, ensuring 99.9% uptime and improved deployment agility.
- Ensured platform scalability and security to support user growth and regulatory compliance.
- Mentored senior and junior engineers, fostering a culture of innovation and accountability.
- Oversaw the design and deployment of AI/ML systems for use cases like fraud detection, KYC automation, and customer segmentation.
- Integrated regulatory requirements into the product lifecycle, ensuring GDPR, PCI-DSS, and AML compliance.
- Presented technology plans and results to stakeholders, investors, and regulators.

Key Achievement

- Developed a "Wallet-as-a-Service" solution that empowers merchants to create custom digital wallets, facilitating seamless customer-to-business and business-to-customer transactions.
- Led the development of AI-powered compliance tools, including KYC document parsing using OCR and NLP, and a real-time transaction anomaly detection system to support AML.

Lead Software Engineer

TandaPay – Nairobi, Kenya | *Dec 2022 – Feb 2024*

- Managed a team of 10 developers, utilizing Agile methodologies to ensure timely and efficient project delivery in building a payment gateway that enables gaming and other merchants to handle both collections and disbursements.
- Set up CI/CD pipelines using Drone IO, which boosted deployment frequency by 50%.
- Designed and implemented a microservices architecture for the backend, improving the application's resilience and overall performance.
- Led code review sessions, enhancing code quality and cutting technical debt by 25%.
- Established automated testing frameworks (unit, integration, and end-to-end), reducing regression bugs by 50%.
- Collaborated with product managers and designers to define and deliver high-quality features on schedule, shortening the development cycle by 15%.
- Built and scaled cross-functional engineering teams; hired, mentored, and retained top technical talent.

Key Achievement

- Decouple messaging service from core platform and centralize all email and short messaging service delivery for easier management of sender id and message content.
- Engineered a transaction processing system capable of handling up to 50 million transactions in a day.

Senior Software Engineer

TandaPay – Nairobi, Kenya | *Sept 2021 – Dec 2022*

- Data Ingestion & Processing Pipelines design.
- Application monitoring and transaction tracing.
- Implemented RESTful APIs and integrated with third-party services, improving overall customer experience.
- Project management.
- Determine operational feasibility by evaluating analysis, problem definition, requirements, solution development and proposed solutions.

Key Achievement

Spearheaded project to enable users to use web applications as alternatives to existing mobile applications. This increased user engagement by 25% and retention by 10%.

Decouple messaging service from core platform and centralize all email and short messaging service delivery for easier management of sender id and message content.

Associate Software Engineer

Cytonn Investments – Nairobi, Kenya | *July 2020 – Sept 2021*

- Writing reusable, testable and clean code
- Maintaining web applications, ensuring uptime and dependability.
- Analyzed and designed specifications used for enhancements and extensions in existing applications.
- Provided 2nd and 3rd level technical support and troubleshooting to internal and external clients.
- Participated in system development life cycle from requirements analysis through system implementation.
- Training and supervising junior developers and trainees, imparting skills and development discipline.
- Working with designers to ensure that web applications developed are intuitive and user-friendly.

Junior Software Engineer

Cytonn Investments – Nairobi, Kenya | *Oct 2019 – July 2020*

- Updated old code bases to modern development standards, improving functionality using PHP Laravel .
- Contributed to development of a new web portal using Vue.js .
- Any other duties may be assigned from time to time.

Projects

Kusco Agri Loans

The system assesses the farmer's produce over a period of time and determines whether he/she can be approved for the loans and then award the farmer the loans.

Lima Portal

A system to link farm produce producers and buyers to cut down on supply chain inefficiencies for agricultural buyers and inconsistent market linkages for farmers.

AI-Driven KYC Automation Platform

Designed and deployed an AI-powered system to automate the KYC onboarding process, reducing manual document review and improving compliance accuracy for a digital banking platform.

References

1. Mwendwa Reuben CTO Purple Elephant Ventures | reuben@purpleelephant.ventures +254729764597
2. Michael Mukolwe from Cytonn Investment | michaelolukaka@gmail.com +254719692332
3. Peter Musyoki CTO Lima Technologies | petermusyoki@limatechnologies.net +254738886831