

BASSANAGA VI SAINT PAUL

+237 697 928 371 | hello@saintbassanaga.com | linkedin.com/in/saintpaulbassanaga | github.com/saintbassanaga | saintbassanaga.com | Yaoundé, Cameroon

PROFESSIONAL SUMMARY

Backend Software Engineer with 3+ years of hands-on experience designing high-performance distributed systems and securing critical financial workflows across government and private sectors. Expert in the **Java 21 / Spring Boot 3.x** ecosystem, **OAuth2/OIDC**, **microservices**, and **hexagonal architecture**. Proven record shipping production-ready, bank-grade APIs under tight deadlines — including a nationwide public finance management system (PROBMIS) at the Cameroonian Ministry of Finance. Founder of **Katica**, a regulated digital escrow platform for the CFA/XAF zone integrating MTN Mobile Money and Orange Money.

TECHNICAL SKILLS

Languages: Java 21 (Virtual Threads, Records, Sealed Interfaces), TypeScript, Node.js v20+, Python 3, SQL
Frameworks: Spring Boot 3.x, Spring Security, Spring Cloud, Spring Authorization Server, Angular 17+, Express.js, Hibernate/JPA
Security: OAuth2, OIDC, PKCE, MFA/TOTP, JWT, End-to-End Encryption, Nginx Hardening, CAS
Architecture: Microservices, Hexagonal Architecture (Ports & Adapters), Domain-Driven Design (DDD), REST, Multi-tenancy, Event-Driven
Data & Messaging: PostgreSQL, SQL Server, Redis, Apache Kafka, Flyway, JPA/Hibernate, Stored Procedures
DevOps & Infra: Docker, GitLab CI/CD, Jenkins, Nginx, Ubuntu 24 Server Admin, VPS (Hostinger), Cloudflare
Testing & Tools: JUnit 5, Mockito, Resilience4j, MapStruct, JasperReports, Postman, Git, Maven, Gradle
AI-Augmented Dev: Claude Code, Anthropic API, Prompt Engineering for Architecture & Code Review

PROFESSIONAL EXPERIENCE

Senior Software Engineer (Freelance)

Jan 2026 -- Present

Upwork

Yaoundé, Cameroon

- Engineered secure, scalable backend systems for confidential international clients across fintech and SaaS domains using **Java 21 / Spring Boot 3.x**, **microservices**, and **hexagonal architecture**.
- Designed and hardened **OAuth2/OIDC** authentication flows (PKCE, MFA/TOTP, dynamic client registration) for web and mobile applications, ensuring compliance with RFC 6749/7591.
- Architected fault-tolerant distributed systems with **Resilience4j** circuit breakers and **Spring Cloud Gateway** BFF pattern, consistently delivering **99.9% uptime** SLAs.
- Hardened production infrastructure: Nginx reverse proxy tuning, Cloudflare integration, rate limiting, WebSocket support, and end-to-end encryption — all delivered under strict NDA.

Senior Software Engineer

Sep 2023 -- Present

SI-IC Group

Yaoundé, Cameroon

- Core contributor to **PROBMIS**, SI-IC's nationwide public finance management system (Ministry of Finance): developed mission-critical modules for **Mission Budgets** (domestic & international), **Bons de Commande Administratifs (BCA)**, **Procès-Verbaux de Réception (PVR)**, and the **Mercuriale des Prix** — backed by **Spring Boot** REST APIs and JasperReports PDF generation.
- Hardened the **OAuth2 Authorization Server** (Spring Authorization Server) with **MFA** and fine-grained **RBAC/ABAC** permission projection, enabling seamless permission inheritance without re-authentication; session state cached in **Redis** with ACL-based key isolation per user role.
- Architected the **microservices decomposition** of PROBMIS using **Spring Cloud**: service discovery via **Consul**, inter-service resilience with **Resilience4j** circuit breakers, and **Nginx** as an API gateway with upstream load balancing and rate limiting.
- Engineered a custom stored-procedure integration framework, reducing data-processing latency by **35%** on high-volume financial transaction batches across State special accounts.
- Modernized the **Mercurial.cm** platform: Maven/Jenkins CI/CD pipeline, secured JEE REST API endpoints on **Payara Server** with end-to-end encryption and RBAC.

KEY PROJECTS

OAuth2 / OIDC Authorization Server | *Java 21, Spring Authorization Server, PostgreSQL, Redis*

- Built a production-ready authorization server following RFC 6749/7591 specifications: PKCE flow, Device Code flow, MFA/TOTP, JPA-persisted tokens/clients/authorizations, and multi-tenant JWT claim customization via `OAuth2TokenCustomizer`.
- Integrated **Spring Cloud Gateway** as a BFF (Backend-for-Frontend) proxy with cookie-based token relay; Angular frontend consumes the OIDC discovery document via `angular-auth-oidc-client`.

Urban Transit Multi-tenancy System (TMS) | *Spring Boot 3, Flyway, PostgreSQL, Kafka, Consul*

- Designed a *schema-per-tenant* multi-tenant SaaS platform for intercity transport management in Cameroon: Gradle multi-module layout, Java 21 records/sealed interfaces, MapStruct DTOs, Flyway migrations, Consul service discovery, and Prometheus observability.
- Enforced strict data isolation across agencies with tenant-aware `AbstractRoutingDataSource` and per-schema Flyway migration runners.

Katica — Pan-African Escrow Platform web.katica.app | *Spring Boot 3, PostgreSQL, Docker, Cloudflare, Hostinger VPS*

- Building a production-grade digital escrow platform designed to support **all major mobile payment networks across Africa** (MTN MoMo, Orange Money, Wave, M-Pesa, Airtel Money, and more), targeting the underbanked African market with a trust-first transaction model.
- Engineered with hexagonal architecture, GitLab CI/CD (SSH rsync deployment), multi-profile Spring YAML (`dev/prod/openapi`), secret rotation via `generate-secrets.sh`, and an Astro + Cloudflare Pages marketing site.

EDUCATION & CERTIFICATIONS

Institut Universitaire Matamfen

Licence 3 -- Génie Logiciel / Software Engineering (IGL)

ALX Africa (Holberton School)

Full Stack Software Engineer Certification (Immersive 70h/week Program)

Yaoundé, Cameroon

2023 -- Present

Online / Yaoundé, Cameroon

2022 -- 2023

ADDITIONAL INFORMATION

Languages: French (native), English (professional working proficiency)

Mindset & Work Ethic: Forged through high-intensity programs (ALX/Holberton 70h/week) and simultaneous academic, professional, and entrepreneurial commitments — bringing structured discipline, resilience under pressure, and a bias for shipping production-ready work over perfect theory.

Brand Ambassador | MTN Cameroon: Field expertise in Mobile Money adoption and digital trust challenges in the African financial ecosystem.