Serge Durand

Software Engineer and Backend Lead

✉ sergedurand205@gmail.com

↖ serge.codes

SUMMARY

Pragmatic and experienced software engineer who is well-versed in technology and writing code to create reliable and user-friendly systems that solve interesting problems. I'm also a skilled leader who has proven the ability to mentor and manage a team of professionals to build software.

EXPERIENCE

Backend Lead
02/2024 - Present

PKFokam Research Center - Afriland First Bank ↗

- Lead backend development team of over 15 developers in building a modular, scalable Core Banking System, ensuring code quality and architectural consistency with SOLID principles.
- Provided technical mentorship and coaching to junior developers and participated in technical interviews for new hires.
- Integrated feature flagging capabilities using Unleash to enable dynamic feature rollout per customer.
- Applied Saga and Event sourcing for robust microservices orchestration using Axon framework to ensure financial operations integrity.
- Implemented an Aggregator service to facilitate data retrieval from multiple entities in multiple services using NestJS and GraphQL Yoga.
- Implemented an audit system to track important financial data during delicate read and write operations using the transactional outbox pattern with RabbitMQ and Postgres.
- Designed and deployed Node-RED based configurable workflows, empowering banks to customize and automate their EOD/COB operational processes.
- Worked on a real-time messaging and notifications system for bank employees, enhancing internal communication through Express.js and Socket.io over WebSockets.
- Implemented a customer data storage solution based on MinIO, ensuring secure and compliant document management.

Open Source Maintainer
08/2022 - Present

URL Shortener ↗

- Developed and maintained an open-source URL shortening platform using Django, with features including custom aliases, click analytics, and link expiration.
- Built a responsive and intuitive frontend using HTML/CSS/JS, with Chart.js integration to manage and visualize link usage statistics (click trends, geographic data, etc.).
- Implemented CAPTCHA validation to protect against spam and bots
- Designed a clean and modular Django codebase, following MVC and MTV patterns and separating concerns for easy collaboration and maintainability.
- Demo: https://youtu.be/xX9J4LlkRI8

Software Engineer
03/2023 - 02/2024

PKFokam Research Center - Afriland First Bank ↗

- Worked on microservices-based and multi-module enterprise applications using Java, Spring Boot, and the Spring ecosystem
- Developed the backend for Afriland First Bank South Sudan's e-banking web application — https://ebanking.afrilandfirstbankss.com
- Built the back-office system for AFB Ivory Coast's mobile banking app SARA — https://play.google.com/store/apps/details?id=com.icafbmobilebanking
- Implemented backend services for partner microfinance institutions' mobile apps, supporting financial inclusion across

multiple jurisdictions such as CEMAC and UEMOA.

Full-stack Developer   01/2023 - 03/2023
HOUSE INNOVATION SARL ↗

- Implemented designs and wireframes into frontend interfaces
- Re-architectured multi-page web apps to single page apps using React and Nextjs
- Used tools like Context api, React query, axios and redux-toolkit to consume Laravel based api and handle in-app state management

Software Developer   01/2021 - 03/2022
TechniqConsulting ↗

- Worked in a software development agency where I took part in developing tailored software according to clients' business requirements.
- Tested software for bugs and operating performance by applying unit, integration and stress testing, added important documentation, and fixed bugs to increase correctness by over 20%.
- Suggested using the appropriate technologies and tools per project which in turn increased time to market.

EDUCATION

Computer Science and Information Systems   2022
University of Yaoundé 1 - Bachelor's degree

CERTIFICATES

Enslish Speaking - Expert (Emmersion)   12/2022 - Present

DevOps Essentials (IBM)   11/2022 - Present

SKILLS

Java/Springboot	PHP/Laravel
Python/Django	Docker/Kubernetes
JavaScript/TypeScript	Team Leadership
Reactjs/Nextjs	Software Testing
Node/Express/Nestjs	System Design
SQL/NoSQL	

LANGUAGES

English	Native	French	Native