

Mouhamadou Moustapha Gaye

Lead Frontend Developer · Dakar, Senegal

mouhamadoumoustaphagaye@esp.sn
github.com/warnerb47

Lead Frontend developer with senior-level experience building enterprise web applications. Delivered a component library of 30+ reusable Angular/Tailwind UI elements, cutting development time by 35% and ensuring design consistency. Designed and implemented FHIR-based data exchange for an EMR system, achieving 95% data accuracy across health information platforms. Seeking to apply proven frontend architecture and automation skills to build high-quality, scalable products.

Skills

Frontend Development

Angular, Tailwind CSS, RXJS, Nx, Storybook, Jest, Redux, Flutter, Ionic

Backend Development

Node JS, Express JS, Nest JS, Camunda, GraphQL, KeystoneJS, Python, RabbitMQ, Strapi

DevOps & Infrastructure

Ansible, Bitbucket Pipeline, Jenkins, Docker Swarm, Portainer, Nginx, AWS, Terraform, Vagrant, ELK, Grafana, Prometheus

Data & Storage

MongoDB, PostgreSQL, Meilisearch, Redis, Apache NiFi, Metabase

HealthTech

FHIR, HL7, Open Concept Lab, OpenMRS

Domain Strengths

Healthcare Interoperability

Designed and implemented FHIR v4-based data exchange architectures for EMR systems.

Digital Transformation & Business Process Automation

Design and implementation of BPMN workflows using Camunda 8, Built workflow-driven applications that accelerated task routing and approval cycles.

Frontend Architecture & Scalable UI Systems

Built reusable component library with Storybook, architected and maintained Nx monorepos with shared libraries.

DevOps

Implemented end-to-end CI/CD pipelines (Bitbucket, Jenkins) and Infrastructure as Code (Terraform, Ansible), Introduced monitoring stacks (ELK, Grafana, Prometheus), Containerized applications with Docker Swarm and managed orchestration via Portainer.

Team Leadership & Developer Enablement

Mentored junior developers increasing team autonomy, Established coding standards and documentation, Led technical decision-making and architecture planning.

Work Experience

MODELSIS - SGF

03/2024 - Present

Software Engineer · Dakar

Digitalization and automation of land administration business processes through BPMN workflow modeling and GIS integration

Worked within an Nx monorepo architecture comprising two interconnected applications and two shared libraries, improving code reuse and maintainability across the platform

Developed and maintained a component library with Storybook, creating 30+ reusable components that reduced feature development time by 35% and ensured 95% design consistency across applications.

Built a web application for land-administration workflow management, implementing complex BPMN-based processes, which accelerated task routing and reduced processing delays

Created a library to abstract Camunda BPM engine integration, enabling seamless workflow orchestration across the platform

Modeled 15 land administration business processes using BPMN, automating workflows and reducing manual processing time from 7 days to 48 hours.

Integrated Geographic Information System (GIS) components for spatial data visualization and land-parcel management, enabling users to view and edit parcel boundaries directly within the platform

MEDSEN

03/2023 - 03/2024

Lead Frontend · Dakar

Led a 2-developer frontend team and developed the EMR application with Angular and Tailwind, following the FHIR v4 standard, which enabled standardized patient data handling across the system

Designed and implemented FHIR data exchange architecture with custom facade supporting 3 FHIR resource types (Patient, Observation, and Encounter), interoperability with 2 external health information systems at 95% data accuracy.

Mentored 2 developers (junior mobile, mid-level web) through code reviews and pair programming, accelerating their autonomous delivery by 60% within 3 months.

Optimized the software development lifecycle by introducing best practices, code reviews, and streamlined deployment processes with Terraform, resulting in faster release cycles and fewer defects

Built 30+ reusable Angular/Tailwind components, reducing UI development time and improving frontend performance, which delivered smoother user interactions

TEAMXGROUP - Logika

12/2022 - 02/2023

Lead Developer · Dakar

Technical leadership and architecture design for the Logika project, managing a team of 3 developers (1 mid-level backend, 2 junior frontend)

Defined the complete technology stack (Angular, Node.js, MongoDB) and designed a monolithic architecture that met project requirements, enabling a unified codebase and simplifying integration across teams

Established development standards and workflows: initialized project structure, implemented Git branching strategy, and set up CI/CD pipelines to ensure consistent code quality

Built technical documentation foundation using Docusaurus, creating a knowledge base for onboarding and maintaining development best practices

Mentored 2 junior frontend developers through code reviews and pair programming, reducing their PR turnaround time by 50% and enabling independent feature delivery within 2 months

Provided ongoing technical support and architectural guidance to ensure team alignment and project delivery

XFactory - Logidoo

06/2022 - 11/2022

DevOps · Dakar

Integrated DevOps practices into the development process, enhancing deployment speed by 60% through IaC and CI/CD implementation within 4 months.

Improved system reliability by implementing comprehensive monitoring solutions, resulting in a 30% reduction in downtime within 2 months.

Streamlined collaboration between development and operations by introducing shared Jenkins pipelines and Slack communication channels, which promoted ongoing process improvements

XFactory - Logidoo

03/2022 - 06/2022

Backend Developer · Dakar

Architectural refactoring and route optimization for Logidoo, a cross-border logistics platform serving African trade routes

Migrated the monolithic Express.js application to three independent NestJS microservices, cutting deployment coupling by 80% and lowering API response time from 750 ms to 320 ms

Implemented Dijkstra's algorithm to optimize 500+ daily shipment routes, enabling cost reduction and faster delivery times for customers across 8 African countries.

XFactory - Mburu

12/2020 - 03/2022

Full-Stack Developer · Dakar

Development and refactoring of a multi-site management platform for an expanding bakery (Angular, Ionic, ExpressJS, MongoDB) Within a team of 3 developers, I evolved from a mobile developer role to full-stack responsibilities as the project grew:

Developed the mobile application with Ionic and Angular for daily bakery management, enabling over 100 users to perform tasks

Orchestrated data migration of 50,000+ records during expansion to 3 new sites: designed and implemented an ETL pipeline using Apache NiFi and Python scripts to ensure multi-site data consistency with 80% data integrity

Refactored the backend and frontend to support a multi-site architecture, enhancing system scalability and maintainability

Designed and implemented a data exchange architecture to synchronize transactions with an external Point of Sale and achieved 99% sync accuracy

Education

Diplôme d'Ingénieur de Conception en Informatique DIC

École Supérieure Polytechnique · 01/2022

Diplôme Supérieur de Technologie en Informatique DSTI

École Supérieure Polytechnique · 01/2019

Baccalauréat Série S1

Cours Privés Seydina Mandione Laye · 01/2017
