



# MENDES DOS SANTOS Alexandre

Senior Software Engineer & SaaS Founder

Distributed Systems | Cloud Architecture | Full-Stack Development | SaaS Products

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LinkedIn MatchATS

## Education & Credentials

### Master of Science in Computer Science

University of Rennes, France | 2018

*Specialization: Distributed Systems & Software Architecture*

### Bachelor of Science in Computer Science

University of Poitiers, France | 2016

*Focus: Algorithms & Data Structures*

## Core Competencies

- ✓ 6+ Years architecting and implementing scalable backend systems
- ✓ Built and launched production SaaS platform serving HR professionals
- ✓ Expert in RESTful API design, microservices architecture, and event-driven systems
- ✓ Full-stack development experience with modern web technologies
- ✓ Proven track record in banking, fintech, transportation tech, and AI-powered solutions
- ✓ Strong experience with cloud-native applications and serverless architectures
- ✓ Bilingual: English (Fluent) & French (Native)
- ✓ EU-based with Swiss work authorization

## Technical Expertise

**Languages:** Java 8-21+, TypeScript, JavaScript, Go, C#

**Backend:** Spring Boot, Spring Cloud, Quarkus, Express.js, GraphQL

**Frontend:** Next.js, React, Angular, Tailwind CSS

**Cloud & DevOps:** AWS (Lambda, API Gateway, DynamoDB, S3, CloudFormation), Vercel, Docker, Kubernetes

**Databases:** PostgreSQL, MySQL, Oracle, DynamoDB, Redis

**Messaging & Auth:** Apache Kafka, RabbitMQ, Clerk, Keycloak, OAuth2, JWT

**Tools:** Git, Jenkins, GitLab CI/CD, JMX, Datadog, ELK Stack

## Professional Experience

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### Senior Backend Engineer | SNCF Connect - France (Remote)

Jan 2024 - Aug 2024

National railway ticketing platform serving 15M+ monthly active users

- Architected and implemented serverless microservices for real-time train booking and seat reservation systems using AWS Lambda, API Gateway, and DynamoDB
- Led the migration of legacy monolithic ticketing services to event-driven architecture using AWS EventBridge and SQS, reducing latency and improving system resilience
- Designed and developed RESTful APIs for multi-modal transportation integration (train, bus, car-sharing), implementing circuit breakers and retry patterns for third-party service reliability
- Implemented Infrastructure as Code using AWS CDK and CloudFormation, automating deployment pipelines and reducing deployment time from hours to minutes
- Optimized DynamoDB data models and query patterns
- Built real-time pricing engine with dynamic fare calculation based on demand, time, and availability using AWS Step Functions for complex workflow orchestration
- Established comprehensive monitoring and alerting using CloudWatch and X-Ray, improving incident detection time
- Collaborated with cross-functional teams in a fully remote environment, participating in architecture reviews and mentoring junior developers

#### Tech Stack:

Node.js/TypeScript, AWS Lambda, DynamoDB, API Gateway, EventBridge, Step Functions, CDK, CloudFormation

## Senior Software Engineer & SaaS Founder

AI-powered recruitment platform serving HR professionals and recruiters

- Built and launched MatchATS, a production SaaS platform that helps HR teams screen candidates in seconds using AI-powered resume matching
- Architected full-stack application using Next.js, TypeScript, and Tailwind CSS for responsive, modern user interface
- Implemented advanced AI features including compatibility scoring, interview question generation, and skill gap analysis
- Integrated Clerk authentication system for secure user management and seamless onboarding experience
- Deployed and scaled on Vercel platform with optimized performance and global CDN distribution
- Designed user-centric features like hard skill compatibility analysis and industry profile matching
- Built comprehensive candidate screening workflows that transform hours of manual review into automated insights

### Tech Stack:

Next.js, TypeScript, Tailwind CSS, Clerk Auth, Vercel, AI/ML APIs

### Product:

match-ats.com

## Backend Software Engineer | Capgemini - Switzerland

Jan 2024 - Aug 2024

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## Backend Software Engineer | Capgemini - Switzerland

Mar 2023 - Nov 2023

Digital transformation for major Swiss banking institutions

- Developed high-performance microservices for real-time payment processing and transaction validation
- Implemented distributed transaction patterns using Saga orchestration for complex multi-service operations ensuring ACID compliance across microservices
- Built secure API gateway layer with Spring Cloud Gateway, implementing rate limiting, request validation, and OAuth2/JWT authentication for PSD2 compliance
- Designed and implemented event sourcing architecture using Apache Kafka for audit logging and transaction history
- Optimized database queries and implemented caching strategies with Redis, reducing average API response time
- Developed automated reconciliation service for cross-border payments using Spring Batch
- Implemented comprehensive unit and integration testing
- Participated in on-call rotation, resolving production incidents and performing root cause analysis

### Tech Stack:

Java 17, Spring Boot, Spring Cloud, Apache Kafka, PostgreSQL, Redis, Docker, Kubernetes, GitLab CI/CD

## Full-Stack Developer | Capgemini - Switzerland

May 2021 - Jan 2023

Wealth Management platform modernization

- Led backend development for COBOL-to-Java migration project, re-architecting legacy systems into modern microservices serving wealth management advisors
- Designed RESTful APIs for portfolio management, risk assessment, and regulatory reporting modules using Spring Boot and Hibernate
- Implemented complex business logic for investment portfolio rebalancing and tax optimization algorithms
- Built integration layer for real-time market data feeds processing price updates daily
- Developed Angular-based admin dashboard for system monitoring and configuration management
- Established CI/CD pipelines using Jenkins and SonarQube, improving code quality metrics
- Mentored junior developers and led technical workshops on microservices best practices

### Tech Stack:

Java 8/11, Spring Boot, Angular, Oracle DB, COBOL integration, Docker, Jenkins

## Backend Developer | Groupe Créative - Rennes

Dec 2020 - May 2021

### Enterprise HR Management Platform

- Architected authentication and authorization system using Spring Security and Keycloak, supporting SSO for 5000+ enterprise users
- Designed RESTful APIs for employee skill mapping, search, and classification using Elasticsearch for full-text search capabilities
- Implemented LDAP/Active Directory integration for seamless user provisioning and role management
- Built data models and database schema for complex hierarchical organization structures
- Developed batch processing jobs for daily synchronization with external HR systems

#### Tech Stack:

Java 8, Spring Boot, Spring Security, Keycloak, PostgreSQL, Elasticsearch, LDAP

## Backend Developer | Groupe Créative - Rennes

Feb 2020 - Dec 2020

### Social Networking Mobile Application

- Led complete backend migration from JHipster monolith to Quarkus microservices, improving startup time and reducing memory footprint
- Implemented real-time messaging features using WebSockets and server-sent events
- Designed location-based matching algorithm for social event recommendations
- Built push notification service integrating with Firebase Cloud Messaging
- Containerized applications using Docker and implemented local development environment

#### Tech Stack:

Java, Quarkus, Keycloak, PostgreSQL, Docker, Firebase, WebSockets

## Junior Backend Developer | Capgemini - Rennes

Oct 2018 - Dec 2019

### Telecom Services Platform for Orange

- Developed REST APIs for TV service provisioning and content delivery management
- Implemented distributed caching layer using Hazelcast, improving API response times
- Built JMX-based monitoring for cache performance and system health metrics
- Wrote comprehensive technical specifications and API documentation

#### Tech Stack:

Java, Spring Boot, Hazelcast, JMX, Docker, JUnit, Mockito

## Personal Projects & Continuous Learning

### MatchATS - AI-Powered Resume Matching SaaS

Product:

match-ats.com

- Full-stack SaaS platform that revolutionizes HR candidate screening with AI-powered matching
- Features include compatibility scoring, interview question generation, and skill gap analysis
- Built with modern tech stack: Next.js, TypeScript, Tailwind CSS, Clerk Auth, deployed on Vercel
- Solves the time-consuming problem of manual resume screening for HR professionals

### Swiss Road Safety Data Analysis Platform

- Built TypeScript ETL pipeline processing 500K+ accident records
- Developed interactive data visualization dashboard with Chart.js

### Game Development with Godot Engine

- Developing multiplayer game backend using C# and GDScript
- Implementing real-time synchronization and state management

### Go Microservices Learning Project

- Building high-performance REST APIs with Go and Gin framework

## Interests & Achievements



Amateur Photographer - Landscape & Street Photography



Competitive Powerlifter -  
S220kg/B190kg/D270kg (680kg total)