

EA

El Mehdi AREZKI

 Lead Software Engineer & System Architect

 Île-de-France, France



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LinkedIn



GitHub



Blog



StackOverflow


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## About

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**Passionate about software architecture and technical innovation**, I'm a Lead Software Engineer **since 2017 professionally** and **since 2012 personally** building large-scale distributed backend solutions.

 **My Mission:** Transform complex ideas into robust, scalable, and performant systems that make a real difference.

 **What Sets Me Apart:**

- Technical leadership of international teams
  - Expertise in cloud-native architecture and microservices
  - Passion for code quality and best practices
  - Ability to bridge the gap between technical and business
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## Professional Experience

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### Company A (European Banking Group) 📍 Île-de-France



#### Lead Software Engineer



04-2023 – Present



#### Key Achievements:

- 🚀 **Large-scale Project Leadership:** Led development of next-gen banking application (v3), built from scratch to modernize legacy system
- 🌐 **International Leadership:** Daily coordination of distributed teams (France & Poland) including developers, Business Analysts, and Product Owners
- 📄 **Technical Excellence:** Technical spec writing, active participation in business rule definition, and functional workshop facilitation
- 🛠️ **DevOps & Infrastructure:** Complete CI/CD pipeline setup (Jenkins, ArgoCD) and Kubernetes orchestration
- 🔬 **Innovation & R&D:** Comparative POCs (Redis vs Apache Ignite, Oracle vs MongoDB, audit solutions)
- 👤 **Mentorship:** Technical coaching, code reviews, and team best practices definition
- ⚡ **Performance:** Performance optimization and proactive production incident management

**Technologies:** Java 21 • Spring Boot • OpenAPI • Redis • Apache Ignite • Oracle • MongoDB • Jenkins • ArgoCD • Kubernetes • RabbitMQ • IBM MQ • Docker • Python • FastAPI

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#### Senior Software Engineer





06-2021 – 04-2023



#### Key Achievements:

- 🏗️ **From-scratch Architecture:** Design and implementation of modern banking platform application architecture
- 🏦 **Regulatory Project:** Development of regulatory reporting application for Banque de France, replacing legacy COBOL system
- 🔁 **CI/CD Excellence:** GitLab CI pipeline implementation, deployment automation

-  **Cross-cutting Components:** Development of audit, authorization, security, and OAuth2 authentication modules
-  **Quality Assurance:** Technical and functional quality guardian, team mentoring

**Technologies:** Java 11 • Spring Boot • DDD • Hexagonal Architecture • Docker • Kubernetes • PostgreSQL • GitLab CI • OAuth2








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## Company B (European Banking Group) Île-de-France

### Senior Software Engineer

 17 **07-2019 – 06-2021**

#### Key Achievements:

-  **R&D & Innovation:** Technical POC study and execution for new strategic projects
-  **Microservices Architecture:** Complete microservices infrastructure design and implementation
-  **K8s Migration:** Successful migration from Docker Swarm to Kubernetes
-  **Security:** OAuth2 server setup and electronic signature service
-  **Optimization:** Significant application and SQL performance improvements, APM integration
-  **Load Testing:** Performance test development with Locust (Python)
-  **Training:** Junior and intern coaching and training

**Technologies:** Java 8 • Spring Boot • Docker • Kubernetes • PostgreSQL • RabbitMQ • Jenkins • ReactJS • ELK • Python




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## Company C (International Online Bank) Paris

### Java Developer/Designer

 17 **09-2018 – 06-2019**

#### Key Achievements:

-  **Full Cycle Management:** Change Request specification to acceptance testing
-  **PSD2 APIs:** Analysis and development of PSD2 APIs (SCA, AIS, PIS)
-  **Strong Authentication:** SCA module implementation and fraud detection

system

- 🎨 **Front-end:** Polymer 2 component development and REST/SOAP integration
- 🎯 **Technical Expertise:** Active participation in technical choices and code

reviews

**Technologies:** Java 8 • Spring MVC • Spring Boot • JAX-RS • AngularJS • Polymer 2 • Jenkins

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## Company D (International E-Commerce) 📍 Rabat

💻 Java Developer/Designer

📅 02-2017 – 09-2018

### 🏆 Key Achievements:

- 🛒 **Large-scale E-commerce:** Development and estimation of new features
- 🔁 **Modernization:** Migration from monolith to microservices architecture
- 🛒 **New Microservice:** From-scratch shopping cart management service

development

- 🏗️ **Technical Design:** Design and implementation with continuous

integration

- 👤 **Mentoring:** Code reviews and new developer training

**Technologies:** Java 8 • SAP Hybris • Spring Boot • AngularJS • Docker • Jenkins • PostgreSQL

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## 🚀 Personal Projects

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🤖 Stock Weather AI

[View Code →](#)

AI-powered financial market analysis application. Uses machine learning to predict market trends and provide real-time insights.

Python

LangChain

AI/ML

Finance

☁️ AltCloud

[View Code →](#)

Alternative secure cloud storage solution. Distributed architecture with

end-to-end encryption for maximum confidentiality.

Flutter

Cloud

Storage

Security

 CartsAPI

View Code →

Modern RESTful API for e-commerce cart management. Microservices architecture with high availability and scalability.

Java

Quarkus

E-Commerce

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## Technical Skills

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### Software Architecture & Design

 **Paradigms:** Microservices • Domain-Driven Design (DDD) • Event-Driven Architecture • API-First • Hexagonal Architecture

 Languages

Java 25

Python

TypeScript

JavaScript

 Frameworks

Spring Boot

FastAPI

LangChain

Apache Camel

React

Hibernate

## **Cloud Native & DevOps**

 **Orchestration:** Kubernetes • Docker • Docker Swarm


 CI/CD

Jenkins

GitLab CI

ArgoCD

GitHub Actions

 Methodologies

Infrastructure as Code

GitOps

Continuous Delivery

## **Data & Messaging Systems**

 **Databases:** PostgreSQL • Oracle • MongoDB • S3

 Caching

Redis

Apache Ignite


 Message Queues

RabbitMQ

Apache Kafka

IBM MQ

## **Leadership & Quality**

 **Leadership:** Team Management • Technical Mentoring • Agile Planning • Stakeholder Coordination

 Quality

Performance Testing (Locust)

E2E Testing (Cucumber)

Code Review

TDD

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## Functional Skills

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E-Commerce

Product catalog management

Delivery systems

Recurring payments

Omnichannel experience



Banking

PSD2: SCA, AIS, PIS, CAF

Wire transfers

Fraud detection

Structured products

Compliance: KYC, AML, ETP, CTP



Document Management

Document management

Audit systems

Advanced versioning

Complete traceability

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## Languages

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 French

 English