

Jordi Jaspers

Lead Software Engineer | Distributed Systems & Applied AI

🏠 Maastricht, Netherlands ✉️ jordijaspers@gmail.com 🌐 github.com/Jordi-Jaspers
☎️ (+32) 47145 64 35 🌐 jordijaspers.dev 🌐 linkedin.com/in/jordi-jaspers

Lead Software Engineer with 6+ years of experience designing and delivering scalable, cloud-native microservices and AI-driven platforms in enterprise environments. Strong expertise in Java (Spring Boot), Python, Kubernetes, REST APIs, and distributed system design. Recently focused on AI/ML production systems including LLM training, retrieval-augmented generation (RAG), multi-agent orchestration, and AI governance platforms. Experienced in leading engineering teams (15+ engineers), architecting secure multi-tenant platforms, and deploying AI solutions into production environments with observability, auditability, and cost control.

Experience

Project Count: 32

2024.09 ● Senior Software Engineer / Consulting Manager - *Ilionx, Maastricht, Netherlands*

Clients: VodafoneZiggo, APG, TenneT

Tech: Java, SvelteKit, Kubernetes, Helm, ArgoCD, PostgreSQL, TimescaleDB, SvelteKit, TypeScript, AI/ML (LLMs, RAG), OpenTelemetry, Prometheus, Grafana, OAuth2/OIDC, Keycloak, Okta, Auth0, Vagrant, VM, Jira, ElasticSearch, Archimate

Business Context: Led a team of 15 engineers while continuing to contribute hands-on as a senior developer. Delivered 20+ enterprise-grade software solutions across telecom and corporate clients. Specialized in IAM, DevOps automation, observability, and modernization of legacy systems. Known for rapid delivery, high-quality output, and forward-thinking integration of AI into engineering workflows.

Key Achievements & Responsibilities:

- Designed and implemented enterprise backend systems for telecom and corporate clients, serving millions of users. Tech stack included Spring Boot, PostgreSQL/TimescaleDB, Kubernetes, and Helm/ArgoCD.
- Architected and developed distributed monitoring and alerting platforms with event-driven timelines, SPIA analysis, and root-cause detection, processing millions of events per day.
- Built a custom CIAM platform, conforming OpenId Connect Spec and integrated with Keycloak, Okta, and Auth0 for other customers, implementing hierarchical permissions and advanced security controls.
- Developed and deployed AI-assisted tooling pipelines:
 - Trained Custom LLM (KirchroaGPT) with RAG over relational and vectorized data.
 - Multi-agent AI system for software automation and rapid POC/MVP delivery
 - Automated training data pipelines using n8n for scraping, transformation, and ingestion
- Designed and implemented developer-facing dashboards and UIs with SvelteKit and TypeScript, integrated with backend services and AI tooling for monitoring and observability.
- built modular Spring framework, enabling rapid, production-ready backend service development across multiple client projects.
- Enabled OpenTelemetry implementation to monitor distributed systems
- Modernized legacy platforms using Spring Boot, Kubernetes, and GitOps (Helm, ArgoCD), achieving zero-downtime releases.
- Applied enterprise architecture principles in client-facing projects as a TOGAF & ArchiMate certified consultant.
- Scaled a team of 15 engineers, owning architectural decisions, technical quality standards, and delivery strategy across enterprise-grade distributed systems.
- Led AI adoption initiatives for enterprise clients, delivering hands-on workshops on LLM integration, RAG architectures, and AI-assisted software engineering practices.

2021.09 ● Medior Software Engineer - *Ilionx, Maastricht, Netherlands*

2021.02 ● Junior Software Engineer - *Ilionx, Maastricht, Netherlands*

2018.09 ● Notable Personal & Enterprise Projects - *Maastricht, Netherlands*

AI Relay – Enterprise AI Gateway & Governance Platform (Under NDA - ilionx)

description: Enterprise multi-tenant AI provider management system enabling secure and auditable AI usage across organizations.

Key Features:

- Multi-tenant architecture with automatic organization assignment via OAuth2 login
- Centralized API key issuance for internal AI consumption
- Pluggable AI provider abstraction layer (OpenAI, Anthropic, local LLMs, etc.)
- Fine-grained team-based permission model for AI providers and MCPs
- Usage tracking, audit logging, cost monitoring, and governance controls
- Admin dashboard for AI policy enforcement and provider configuration
- RESTful microservice architecture deployed via Kubernetes
- Designed provider-agnostic AI abstraction layer to decouple enterprise systems from specific LLM vendors.
- Implemented rate limiting, quota enforcement, and cost tracking per organization/team.
- Built secure token proxy layer preventing direct exposure of third-party AI credentials.

Impact:

- Enabled enterprises to safely adopt multiple AI providers with governance, cost control, and security isolation.
- Designed to scale horizontally for high-throughput AI workloads.
- Supports integration of custom model control planes (MCPs).

KirchroaGPT – Domain-Specific Local LLM & RAG System (Under NDA Local Government)

description: Designed and trained a domain-specific LLM to digitally preserve and revitalize the Kirchroa dialect in collaboration with regional cultural institutions.

Scope:

- OCR digitization of historical books and dialect dictionaries
- Custom NLP preprocessing pipeline for low-resource language normalization
- Vector database + relational data hybrid RAG architecture
- Domain-specific prompt tuning and evaluation loops
- REST API exposure for public and institutional access
- Deployed in containerized environment with observability

Impact:

- Enabled structured querying of historical and cultural knowledge
- Preserved linguistic heritage using modern AI infrastructure
- Demonstrated application of AI for governmental and cultural use cases

Eventify – Multi-tenant monitoring Tool (<https://github.com/Jordi-Jaspers/Eventify>)

- event-driven monitoring platform that could handle millions of events/day with secure separation of data.
- spec / test driven design with automated AI workflow in controlled environment.

JFrame – Open Source Java Framework (<https://github.com/JFrameOSS/JFrame>)

- Developed a modular framework for Spring Boot applications with reusable components, JPA utilities, and observability integration.
- Designed APIs, automated CI/CD workflows, and extensive tests for community adoption

Multi-Agent Development Automation Platform

- Designed a multi-agent AI system for automating software development workflows, enabling rapid delivery of MVPs and POCs.
- Orchestrated agents for code generation, testing, documentation, and deployment, with human-in-the-loop quality control. Utilizing Ralp-Loop for automated optimizations

Aniflix – Full-Stack Streaming Platform (<https://github.com/Jordi-Jaspers/Aniflix>)

- Built a full-stack application (Spring Boot backend + SvelteKit frontend) demonstrating scalable API design, modular architecture, and modern UI practices.
- Focused on clean architecture, performance, and integration between backend services and developer-facing frontend.

Education

2021.02 ● **Master's Thesis Electronic & Software Engineering**

Hanyang University - Ansan, South-Korea

Subject: Inventing a framework for anomaly detection in the radio spectrum using Machine Learning.

2020.07 ● **Master of Science: Electronic & Software Engineering**

UHasselt | KULeuven – Diepenbeek, Belgium

Courses: OOP in Java, Compilers, Algorithms, Operating Systems, Data Structures, Docker, Advanced Mathematics, VHDL & FPGA programming.

2020.07 ● **Bachelor of Science: Electronic & Software Engineering**

UHasselt | KULeuven – Diepenbeek, Belgium

Courses: Machine Learning 101, Signals & systems, Databases & structures, Digital systems, Functional Programming in Haskell, Software Design in C++, Unix Operating systems and Linux Distros, Chip-design, Telecommunication.

Certifications

- Oracle Oracle certified SQL Developer
- Coursera Oracle Database Design and Management
- Coursera Advanced Micronaut & Spring development
- Coursera Machine Learning Basics
- Global Knowledge TOGAF Foundation
- Global Knowledge Archimate Foundation
- Global Knowledge Archimate Practitioner
- Global Knowledge Sveltekit Certified developer
- Hapkido Official Hapkido Trainer - 3rd Grade Black Belt

Skills

Main development Stack:

Java (Spring, Micronaut, Quarkus), Python (AI/ML pipelines, LLM integration, automation), Sveltekit (Typescript)

Frameworks & Tools:

- Spring | Micronaut | Quarkus
- SvelteKit
- Kubernetes
- ArgoCD
- Observability (OpenTelemetry, Zipkin, Prometheus, Grafana)
- OAuth | OIDC (Keycloak, Okta, Auth0)
- SQL (SQLite, Oracle, MariaDB, PostgreSQL, TimescaleDB)
- NoSQL (Mongo)
- Redis
- Zookeeper
- LDAP
- Apache Studio
- Archimate
- Vagrant
- Lima
- Oracle OCI
- Eventing (Kafka, RabbitMQ)
- ElasticSearch | Kibana

Coding Languages:

- Java
- Kotlin
- Groovy
- Golang
- Python
- Javascript | Typescript
- CSS | HTML
- Bash
- Haskell
- VHDL
- C++
- SQL