

Luís Peixoto

Backend Software Engineer · Java · Spring Boot · Distributed Systems

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Vila Real, Portugal · Open to relocation or full remote · EU citizen, no permit sponsorship needed



Backend engineer who owns high-scale Java systems and fixes what others get stuck on. Three years at CEiiA, one of Portugal's leading engineering centres, building AYR, an award-winning platform that validates millions of trips a month.

SELECTED ACHIEVEMENTS

- Held a production platform alone for ~6 months after every senior engineer left: **15 microservices, 20+ incidents resolved, zero data loss**, millions of trips flowing uninterrupted.
- Cached authentication tokens in Redis, cutting latency on **every request from ~300 ms to ~14 ms (20× faster)**.
- Built and ran **15+ Spring Boot microservices** processing hundreds of millions of records.
- Wired AI agents into daily engineering: a 30-minute daily report now writes itself, test suites land in **hours instead of days**, scaffolding in minutes instead of ~5 hours.

PROFESSIONAL EXPERIENCE

Software Engineer Jul 2023 – Present
CEiiA · Centre of Engineering and Product Development Matosinhos, PT (Hybrid)

Intern to owner of large-scale distributed systems, now driving cross-team technical direction alongside the platform architect.
Cross-team technical direction 2026 – present

- Works with the platform architect on solution design and architectural trade-offs across multiple products.
- Decomposes monoliths into clean, performant microservices with authentication and security hardening built in.
- The engineer other teams turn to for the problems with no obvious answer.

AYR · Sustainability & Mobility Platform 2024 – 2025
New European Bauhaus prize winner: quantifies CO₂ avoided through sustainable mobility, rewarded as digital green credits.

- Built trip validation and digital wallet services: accounts, transfers, purchases, green-credit rewards.
- Delivered real-time CO₂-avoided monitoring across multiple calculation methods, and onboarded major partners.
- Designed REST APIs on PostgreSQL; removed **N+1 query patterns** by batching data access.
- Ran async messaging on Kafka with Redis caching; tracked health and SLA compliance in Grafana and Prometheus.
- Built internal React/Next.js dashboards for trip processing and errors, ending reliance on the frontend team.

Data ingestion & monitoring (2023 – 2024): ingestion, processing and monitoring of trips and vehicles. Foundational Spring Boot and PostgreSQL work at scale.

Software Developer Intern Mar 2023 – Jun 2023
CEiiA Matosinhos, PT

- Designed and delivered a backoffice trips-and-vehicles viewer for an emerging mobility project. Led to an **immediate full-time hire**.

Earlier: Frontend Developer intern at X-Plora, responsive front-ends and reusable components in Vue.js (2022) · Student Technology & Digital Innovation, UTAD Student Associations (2022 – 2023).

TECHNICAL SKILLS

Core Java, Spring Boot, Spring Security, JPA/Hibernate, REST APIs, PostgreSQL, Redis, Apache Kafka, RabbitMQ
Platform Docker, Kubernetes, GitLab CI, SonarQube, Grafana, Prometheus, JUnit, Mockito, Swagger/OpenAPI, Git
Also TypeScript, React, Next.js · Claude Code and local LLM agents in the daily workflow · exploring Go, Rust, Tauri

PERSONAL PROJECTS

Dead Letter · SMTP sink that captures outgoing email in local development *Go, Docker, Next.js* deadletter.peixotomdb.com
Tools · Developer and design utilities in one web interface *Next.js, TypeScript, shadcn/ui* tools.peixotomdb.com
Pulse · macOS menu-bar monitor for real-time system metrics *Tauri, Rust, React* (work in progress)

EDUCATION, CERTIFICATIONS & LANGUAGES

MSc Informatics Engineering & Web Technology (in progress), Universidade Aberta 2024 – present
Graduate Coursework in Software Engineering, Instituto Superior de Engenharia do Porto (ISEP) 2023 – 2024
BSc Communication and Multimedia, Universidade de Trás-os-Montes e Alto Douro (UTAD) 2020 – 2023
Certifications: CMMI · SOLID Architecture · Java Development Course
Languages: Portuguese (native) · English (professional fluency, C1)