

Luca **Spalierno**

SOFTWARE ARCHITECT & TEAM LEADER

Munich, Germany

spalierno@gmail.com | lucaspal | lucaspalierno

Summary

Nine years of building software, most of it healthcare, and most of it owned end to end: the architecture, the rollout, and the parts that only break once real people use them.

At SEMDATEX I am Software Architect for a European e-Health data exchange platform. I design the system its users work in and the API contracts other organizations integrate against, own the LLM services running compliance automation behind it, and run the platform on AWS, Kubernetes and Pulumi. Most of my day goes into specs, constraints and review while coding agents do the typing; I built the guardrails that make that safe on regulated data. I have shipped on enough stacks to have stopped having a favourite one.

Experience

SEMDATEX — *Remote (Munich, Germany)*

Nov. 2024 – Present

Software Architect — *Sep. 2025 – Present*

- Own architecture and AI strategy for the platform its users work in: system and domain design with DDD and event-driven patterns, the API contracts other organizations integrate against, and the technical decisions a regulated environment demands (ISO 13485, ISO 27001, IEC 62304).
- Ship LLM-backed services into production: document extraction and classification pipelines, audit checks, and the quality gates that decide what reaches a regulated workflow.
- Lead AI-assisted development across engineering teams, including the review and testing guardrails that keep agent-generated code out of production until it has been verified.
- Run platform setup end to end: Kubernetes, Pulumi infrastructure as code, GitHub Actions pipelines, observability, and the ADRs that record why each decision was made.
- Manage and mentor a cross-functional team, define QMS and SOPs, and turn what breaks in customer integrations into product fixes.

Senior Software Engineer — *Nov. 2024 – Sep. 2025*

- Designed and implemented microservices (Java, Spring, PostgreSQL) with DDD and event-driven patterns, built CI/CD pipelines (GitHub Actions), and set up observability for a Kubernetes-deployed platform starting from scratch.
- Shipped the backend foundation that carried the platform into its next phase, which led to the architect role.

TypeScript | Java | Spring | PostgreSQL | AWS | Kubernetes | Pulumi | Github Actions | LLM | AI-Assisted Development | ADRs

iATROS — *Munich, Germany*

Apr. 2021 – Aug. 2024

Lead Software Engineer & Agile Coach — *Jul. 2023 – Aug. 2024*

- Led technical direction for a chronic heart disease platform, scoping features with clinical stakeholders and turning clinical requirements into software patients used daily.
- Recruited, onboarded and mentored engineers, and held code review and architecture decisions across web and mobile.

Lead Mobile Engineer — *Nov. 2022 – Jul. 2023*

- Led architecture and development of cross-platform mobile apps in Flutter, driving technical decisions across the mobile stack.

Senior Software Engineer — *Apr. 2021 – Oct. 2022*

- Built the backend services behind the platform's patient-facing features (NestJS, Django) and contributed to its architecture.

TypeScript | NestJS | Python | Django | Dart | Flutter | FHIR | GitLab

SafeNow — *Munich, Germany*

Software Engineer — *Feb. 2020 – Mar. 2021*

- Joined as one of the first engineers when the company had no product yet, owning the build end to end: two apps from scratch (Flutter, Kotlin, GraphQL/Hasura), CI/CD (Codemagic, Jenkins), release process and testing standards.
- Delivered to production under 12 months, which the company used to close its seed round.

Dart | Flutter | Kotlin | GraphQL | Hasura | Codemagic | Jenkins

Systematic A/S — *Aarhus, Denmark*

Systems Engineer — *Aug. 2017 – Jan. 2020*

- Built and delivered features for a healthcare application used by every nursing home in Denmark, backend (Spring Boot, Java/Kotlin) and frontend (Angular, TypeScript).
- Led a team of seven engineers as Scrum Master, driving Agile processes and reducing technical debt.

TypeScript | Angular | Java | Spring Boot | SQL | FHIR | Agile | SAFe

Stibo Systems Accelerator — *Aarhus, Denmark*

Graduate Research Engineer — *Sep. 2016 – Jun. 2017*

- Researched and implemented a delay-resilient scheduling system for rail networks using heuristic optimization, taking it from algorithm design to a deployed system.

Python | R | Logistics | Resource Optimization

Other

ReDI School of Digital Integration — *Munich, Germany*

Teacher & Mentor — *Aug. 2020 – Apr. 2026*

- Taught back-end development to adults transitioning to IT careers. Offered technical and career mentorship through the ReDI Connect initiative.

Copenhagen Capacity — *Denmark*

Youth Goodwill Ambassador — *Sep. 2016 – Jun. 2017*

- Member of a global network of international talents in Denmark. Took part in a talent development program and received branding training covering presentation techniques, communication, media, and marketing skills.

Education

Aarhus University — *Aarhus, Denmark*

MSc Computer Engineering — *Aug. 2015 – Jun. 2017*

Software engineering and architecture specialization.

Thesis: *Minimization of railway delay propagation by heuristic optimization* — System to handle delays in a shared, resource-constrained domain using heuristic optimization.

Polytechnic University of Bari — *Bari, Italy*

BSc Computer Science and Automation Engineering — *Oct. 2010 – Apr. 2015*

Thesis: *Proximity Marketing* — Context-aware Android application using sensor-based context detection to adapt to environment and user needs.

Skills

Architecture & Design: System Design, API Design, DDD, Event-Driven, Microservices, Observability, ADRs

Languages & Frameworks: TypeScript, Java, Kotlin, Dart, Python, Spring Boot, NestJS, Angular, Flutter, GraphQL, SQL

Infrastructure & Platform: AWS, Kubernetes, Docker, Pulumi (TypeScript IaC), GitHub Actions, GitLab, Hasura, Keycloak, Codemagic, Jenkins

AI & Agents: LLM Integration, Coding Agents (Claude Code, MCP), AI-Assisted Development Guardrails, Compliance Automation

Methodologies & Standards: Agile, Scrum, Kanban, SAFe, ISO 13485, ISO 27001, IEC 62304, FHIR

Languages

English ●●●●●

Italian ●●●●●

German ●●●○○

Danish ●○○○○