

MARCELLO MUSCARA

FREELANCE SOFTWARE DEVELOPER

I build full-stack applications with Java, Spring Boot and Angular: API-first backends, modern interfaces, stable in production. Freelancing since 2018, with more than 20 years of platform and e-commerce development before that. My focus is system architecture, microservices and running them on self-operated Kubernetes infrastructure.



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📍 Bedburg, Germany

TECHNICAL SKILLS

JavaSpring BootSpring CloudOpenAPIPostmanGradleKeycloakHTMLCSS

JavaScriptTypeScriptAngularNGRXNGXSBootstrapKafkaRabbitMQDocker

KubernetesHelmRancherGitLabGitHubPostgreSQLMariaDBMongoDBOracle

MinIOElasticsearchKibanaSupersetOllama n8nSpring AI

LANGUAGES / WEB

GermanNative/BilingualEnglishProfessional WorkingItalianLimited Working

inmarcello-muscara

codeministry

codeministry.de

codeministry.io

PROJECTS

01/2024
Present

Platform Development for a Large Insurer

FIDA GmbH · Fullstack Developer

Development in the insurance domain: backend services and an Angular front end for one of Germany's large insurance companies.

Stack: Java, Spring Boot, Angular, NGXS, Oracle, Kafka, Kubernetes

09/2020
07/2023

Relaunch of Corporate Portal & ERP

encircle360 GmbH, Remote · Fullstack Developer, System Architect

Rebuild of the corporate portal and ERP of a mid-sized company with around 600 employees, including the REST API and the complete front end based on Nebular and ngx-admin.

- Permission and role management on top of Keycloak
- Requests for holiday, business trips, sick leave and overtime
- Time tracking including travel expenses and per-diem allowances under applicable tax law
- Staff scheduling with Bryntum Scheduler Pro
- Client-specific DMS, applicant management and controlling exports

Plus the migration of all data and employees from the legacy system and reporting via Superset BI.

Stack: Spring Boot, MongoDB, PostgreSQL, Keycloak, Angular, TypeScript, NGRX, GitLab CI/CD, Kubernetes, Helm, Superset

10/2019
05/2020

Backend, API and Architecture for a Mobile and Web App

FoundersLane GmbH, Cologne · Backend / API Developer, System Architect

Build-out of the platform and its architecture for a mobile and web app delivering analytics-driven managed-care solutions based on the value-based medicine approach.

Stack: Spring Boot, MongoDB, Angular, SurveyJS, Elasticsearch, Kibana, Docker, GitLab

04/2019
10/2019

Client Project & Day-to-Day Business

Nexum AG, Cologne · Backend / API Developer

Maintenance and extension of a shop built from several Spring Boot services, integration with commercetools and data transfer into the ERP.

Stack: Spring Boot, commercetools, Jenkins

11/2018
03/2019

MVP of an API Portal

FoundersLane GmbH, Cologne · Backend / API Developer

MVP and MSP of an API portal through which internal services of one of Germany's largest insurers can be integrated and monetised by third parties.

Stack: Spring Boot, Spring Cloud, Kafka, Elasticsearch, Kibana, Logstash, MongoDB

05/2018
09/2018

Online Shop Relaunch

Nexum AG, Cologne · Backend Developer

Relaunch of the Mustang Jeans online shop on Salesforce Commerce Cloud.

Stack: Salesforce Commerce Cloud, ISML, JavaScript

03/2018
07/2018

Middleware Services

FOND OF GmbH, Cologne · Backend Developer

Build-out and further development of middleware services for data exchange between the company's own online shops.

Stack: Java, Jakarta EE, Wildfly Swarm, ActiveMQ, Apache Camel

PRODUCTS & INFRASTRUCTURE

Own products, open source and infrastructure — some built in partnership.

sellytics · Amazon Market Data API

encircle360 GmbH · as engineering partner · 02/2018 – 07/2023

Amazon market data API for vendors and sellers: competitor pricing, product details, search and category rankings as well as reviews, in real time and as history. A job and task system refreshes data selectively; billing runs on a subscription with a monthly credit allowance.

Stack: Spring Boot · Spring Cloud · MongoDB · Elasticsearch · RabbitMQ · Kubernetes · Helm · GitLab CI/CD · Angular

Offline-first Inspection Platform

Own product · Fullstack Developer, System Architect · seit 06/2025

Condition documentation for large facilities: points on high-resolution plan drawings, with photos, files and 360° panoramas attached, archived as a versioned snapshot. Fully usable without a network connection.

Alongside it a dedicated AI service: a locally hosted vision model detects equipment in photos and suggests categories, constrained by a closed vocabulary and an enforced JSON schema.

Stack: Angular · NgRx Signals · PouchDB/CouchDB · Keycloak · Spring Boot · Spring AI · Ollama

Kubernetes Platform and Hosting

Own infrastructure · Operations · seit 02/2026

k3s cluster on Hetzner Cloud, entirely as code: Terraform for servers, network and DNS, Ansible for installation, ArgoCD for deployments. Hosts my own products and client sites.

Stack: k3s · Terraform · Ansible · ArgoCD · Helm · Traefik · Longhorn

straightmail

Open Source · encircle360-oss, Apache 2.0 · seit 07/2020

Spring Boot service with a REST API for sending e-mails, with templating via Freemarker. Available as a container image on GHCR.

Stack: Java · Spring Boot · Freemarker · Docker

gitcap

Open Source · codeministry · seit 03/2026

Local-first tool that condenses development activity from several sources into a single daily summary.

Stack: Java · Spring Boot · Angular · Keycloak

EXPERIENCE

03/2018
Present

Freelance Software Developer

codeministry, Bedburg / Remote

Backend, API and full-stack development for clients, plus my own products on self-operated Kubernetes infrastructure.

Stack: Java, Spring Boot, Angular, Kubernetes, Helm, ArgoCD

06/2017
02/2018

Java Developer, Architect

Crowdfox GmbH, Cologne

Build-out and extension of the microservices architecture running the REST-based API services.

- APIs for product and category data
- Services for aggregating product and category data
- Kibana-based data analysis
- Landing pages with headless CMS integration

Stack: Spring Boot, Spring Cloud, Netflix OSS, Spring JPA, Elasticsearch, MongoDB, RabbitMQ, Rancher, Prometheus, Kibana, Contentful

01/2016
05/2017

Java Developer

shop-apotheke.com, Düsseldorf / Venlo

Further development of the XSITE e-commerce SaaS solution, by then a wholly owned subsidiary of shop-apotheke.com and aligned with its business requirements. The existing architecture was extended with a microservice environment.

Stack: Spring Boot, Spring Cloud, Spring JPA, MongoDB, Netflix OSS

06/2002
01/2016

Fullstack Developer, Project Lead

Xsite GmbH, Düsseldorf

Implementation of the in-house SaaS e-commerce solution as well as the build-out, maintenance and extension of client shops. Clients included Vallourec, Evonik, Europa Apotheek and shop-apotheke.com.

Fourteen years in changing roles: front-end and back-end development, project and team leadership, architecture and consulting.

Stack: Java, Groovy, HTML/CSS, MySQL, Elasticsearch, Tomcat

EDUCATION

08/2000
08/2002

IT Specialist for Application Development

Xsite GmbH (Düsseldorf)

- IHK vocational training as an IT specialist for application development
- Focus on e-commerce, shop systems and CMS

08/1996
07/2000

Electrical Engineering Studies

RWTH / FH Aachen

- Diploma programme in electrical engineering, specialising in information technology
- Left without a degree