

# Mohamed Elmedany

Senior Software Engineer · Software Architect

mo.elmedany@gmail.com · +31628945264 · Almere, Netherlands · [github.com/melmedany](https://github.com/melmedany) · [linkedin.com/in/melmedany/](https://linkedin.com/in/melmedany/)

---

## PROFESSIONAL SUMMARY

---

Senior software engineer with 12+ years building domain-centric distributed systems. I design evolvable architectures that align software boundaries with business domains and support safe, incremental change. Led modernization of legacy platforms into resilient, observable cloud environments, reducing operational risk and enabling independent evolution. Certified iSAQB CPSA-F. Hands-on across architecture and delivery with test-first practices and strong domain modeling. AI-assisted development is part of my daily workflow.

## WORK EXPERIENCE

---

### Senior Software Engineer / JVM Chapter Lead — iO Digital

Aug 2024 – Present (1.8 yrs)

At iO Digital I worked as a consultant engineer across client engagements while also led the JVM Chapter, connecting engineers across campuses and projects, drive technical alignment, and raise the collective bar. I authored articles on the iO tech hub and helped define what good engineering looked like. The consulting model sharpened my ability to onboard fast, earn trust quickly, and deliver in unfamiliar codebases.

- Led the JVM Chapter, connecting engineers across projects for knowledge sharing and technical alignment
- Delivered client engagements as a consultant, including work at Kuehne+Nagel
- Authored technical articles published on the iO Digital tech hub
- Contributed to raising engineering standards across the JVM community within iO

**Technologies:** Java, Kotlin, Spring Boot, OpenTelemetry, Kubernetes, GCP

### Senior Software Engineer (via iO) — Kuehne+Nagel

Aug 2024 – Jul 2026 (1.9 yrs)

At Kuehne+Nagel I designed and implemented observability architecture using OpenTelemetry, establishing metrics, alerting, and dashboards with Grafana and Prometheus that reduced incident response time and improved production resilience. I also led domain model redesign efforts, removing technical debt and aligning code with current business rules. I work in a DevOps manner, taking ownership of deployments, monitoring, and production stability and I bring test-first practices and a habit of raising engineering quality across the team.

- Introduced AI-assisted coding via Junie, accelerating development work while safeguarding sensitive and customer data
- Initiated technical quality meetup where it was the birthplace for multiple decision and architectural improvements
- Introduced and implemented application monitoring, alerting and dashboard setup
- Collaborated closely with DevOps engineer during GitLab migration, ensuring smooth transition and establishing clean separate repositories and pipelines

**Technologies:** Kotlin, GCP, Kubernetes, Docker, PostgreSQL, Terraform, Axon

## Senior Software Developer — Bol.

Nov 2018 – Mar 2024 (5.3 yrs)

My time at bol. gave me deep familiarity with high-availability systems operating at scale, including event-driven architectures via PubSub, containerized workloads on Kubernetes, and CI/CD pipelines managed through GitLab. I have hands-on experience with GCP including BigQuery and Cloud SQL, and I work daily in Kotlin and Java. I ran new engineers onboarding and set the engineering bar for my team. As part of the Architecture Circle, I reviewed and improved service designs across bol. domains

- Architecture design and implementation using Kotlin/Java
- Backend development with frontend work including configuration interfaces and service management pages
- Migrating legacy systems to modern, scalable architectures
- Leading the technical team and fostering good engineering practices
- Guiding new team members and encouraging continuous improvement
- Served as Scrum Master, fostering a cohesive work environment and leading engineer onboarding

**Technologies:** Java, Kotlin, Spring, GCP, Kubernetes, Google BigQuery, Google Pub/Sub, Docker, Gitlab CI/CD, Google Cloud, PostgreSQL, Terraform

## Java Developer — Vodafone Shared Services

Sep 2017 – Oct 2018 (1.1 yrs)

Part of the strategic arm of Vodafone Group. Focused on digitalising B2B client onboarding and integrating Cortex workflows into existing platforms.

- Digitalizing onboarding and reporting process for B2B services
- Digitalizing technical support to diagnose problems in the services
- Collaborating with a team of 4 developers to automate and digitize real-time business processes and workflows
- Integrating Cortex in the existing system and making it available for clients

**Technologies:** Java, JavaScript, Bash, Cortex

## Senior Java Developer — Vodafone

Aug 2016 – Aug 2017 (1 yr)

Worked on Extranet, a high-performance retail platform with four independently communicating modules. Drove the migration from Java 6 to Java 8, introduced JBoss, moved the team from SVN to Git, and established TDD.

- Analyzed user requirements and designed system features and functionality
- Migrated from Java 6 to Java 8
- Introduced JBoss as the application server
- Migrated from SVN to Git
- Introduced TDD (Test Driven Development)

**Technologies:** Java, Spring, Oracle, Angular, JBoss

## Software Developer — Ferrycode

Apr 2014 – Jul 2015 (1.3 yrs)

Early-career work at a startup delivering editorial management tools for news agencies and government systems for Dubai, covering the full cycle from requirements to on-site customer training.

- Built a suite of web-based editorial management tools for newspapers and news agencies
- Developed a school library management system for the government of Dubai
- Built a content indexing system for books, CDs and other media for the government of Dubai
- Conducted on-site customer visits to configure tailored solutions and deliver training

**Technologies:** Java, JUnit, PostgreSQL, Angular, Gitlab CI/CD

## TECHNICAL SKILLS

---

### Languages

Java, Kotlin, Python, JavaScript, TypeScript, Bash

### System Design

Distributed Systems, Scalability & High Availability, Resilience & Fault Tolerance, Consistency Models

### **SRE & Reliability**

SLOs / SLIs, Observability, Incident Management, Automation, Distributed Tracing

### **Architecture**

Domain-Driven Design, Microservices, Event Driven Architecture, gRPC, Websockets, OpenAPI

### **Cloud**

AWS, GCP, Kubernetes

### **Frameworks**

Spring Boot, Spring AI, Spring Security, Quarkus, Ktor, Hibernate, Axon, React, Vue.js

### **Databases**

PostgreSQL, MySQL, MongoDB, Redis

### **DevOps**

Docker, Terraform, Git, Gitlab CI/CD, Gradle, Maven, Jenkins, TeamCity

### **Testing**

JUnit, Mockito, JMeter, TestContainers, Wiremock, Kotest

### **Messaging**

Kafka, Google Pub/Sub, RabbitMQ, ActiveMQ

### **Observability**

Grafana, Prometheus, OpenTelemetry

## **EDUCATION**

---

**Bachelor in Computer Science — Modern Academy**

Sep 2009 – Sep 2013

## **CERTIFICATIONS**

---

- Certified Professional for Software Architecture (CPSA-F) — iSAQB
- AWS Certified Cloud Practitioner — Amazon Web Services (AWS)
- Certified ScrumMaster (CSM) — Scrum Alliance

## **LANGUAGES**

---

- Arabic: Native
- English: Fluent
- Dutch: Beginner