

PROFILE

Ivaylo Tonev

Solution Architect & Senior Fullstack Developer



Solution Architect with **18+ years of experience** in design, architecture, and delivery of scalable enterprise solutions.

Focus areas: **Java/Spring Boot** Microservices, **Angular & React** Typescript Micro frontends, Apache Kafka **Event-driven architecture** and Adobe Experience Manager (AEM).

Industries: Banking & Insurance, Automotive, Pharma, Retail, Healthcare.

Current and future focus: **AI-assisted** software development with **Claude Code** and agentic coding workflows with **LangGraph**.

PERSONAL DATA

Name	Ivaylo Tonev
LinkedIn	https://www.linkedin.com/in/ivaylotonev/
Web	www.ivaylotonev.com
Availability	Location: Remote / DACH
Languages	German (business proficient), English (business proficient)
Education	Dipl. Computer Science, TU Munich EMBA Innovation & Business Creation, TU Munich Certified Scrum Master

AREAS OF FOCUS

Greenfield architectures for regulated industries (Banking, Insurance, Pharma, Healthcare) · Legacy monolith-to-microservice modernization with Domain-Driven Design and microfrontends · AEM platform provisioning and multi-tenant rollouts for enterprise groups · Coaching of development teams and agile transformation · AI integration into enterprise delivery pipelines.

INDUSTRY EXPERIENCE

Banking & Financial Services (4 projects, ~8 yrs) · **Automotive** (5 projects, ~5 yrs) · **Pharma** (2 projects, ~3 yrs) · **Insurance** (2 projects) · **Retail / Food** (3 projects) · **Healthcare / Health Insurers** (ongoing) · also: Energy, Travel, Telecommunications, IT Services.

SKILLS

Frontend	TypeScript (17 yrs, 18 projects) · React, Redux, TanStack Query, Router, Form, Zod, xState, Vitest, Cypress (3 yrs, 3 projects) · Angular mit RxJs/NgRx, Angular Material, React-Bootstrap, Jasmine, Karma (6+ years., 4 projects) · Vue.js, ExtJS, HTML5/SCSS · Node.js
Backend	Java (18 yrs, 16 projects) · Spring Boot (RestTemplate, Reactive WebFlux) · Spring Data JPA/Hibernate, Spring Data Mongo · Eclipse Microprofile/Java CDI · OSGi (Apache Felix, Apache Sling) · JUnit, Mockito, Powermock, Lombok
APIs & Security	REST Services (15+ yrs, 16 projects) · GraphQL (3+ yrs) · OpenAPI/Swagger · OAuth 2.0, JWT · Apache Solr · Microservices architectures (7+ yrs)
AI & Agentic Coding <i>(current & future focus)</i>	Hands-on experience with LLM-based code generation, AI-assisted architecture documentation, AI-assisted prototyping and automated testing within the delivery cycle · actively building expertise in LangGraph and multi-agent workflows · integration of AI into enterprise delivery pipelines
AEM	AEM as a Cloud Service & AEM 6.x (17+ yrs, 14 projects): Sites, DAM, Dispatcher, HTL, OSGi/Sling Models, Core Components · Content & Experience Fragments · Multi-Tenant Rollouts & Platform Provisioning · Adobe Target, Campaign, Analytics, DataLayer, ACL
Databases	Oracle 12c, PL/SQL (10+ yrs) · PostgreSQL · MongoDB
Cloud & Infrastructure	Kubernetes, OpenShift, Docker · AWS, GCP · Apache Kafka · Maven, Gradle, Webpack, Vite · CI/CD with Jenkins & GitLab
Architecture	Domain-Driven Design · Clean Architecture · Hexagonal Architecture · Microservices & Microfrontends · TOGAF 10 · ArchiMate modeling
Methodology & Soft Skills	Scrum (Certified Scrum Master), Kanban, Team Topologies · Stakeholder management · Coaching of development teams · Customer focus, strong communication skills
IDE	IntelliJ IDEA, WebStorm, VS Code, Eclipse

EDUCATION

03.2024	EMBA in Innovation & Business Creation — TU Munich
11.2012	Certified Scrum Master — course by James O. Coplien
09.2008	Diploma in Computer Science — TU Munich

RECENT PROJECTS

<p>Statutory Health Insurer <i>Solution Architect, Fullstack Developer</i> since 09.2025</p>	<p>Modernization of the digital infrastructure of a statutory health insurer: migration of three monolithic core processes into a microservices landscape with a Java backend and React frontend. Implementation of regulatory requirements as well as new features at the request of business units.</p> <p>Activities: Architecture and migration of existing processes onto modern technologies · implementation of statutory requirements and new features · fullstack development of frontend and backend · integration with Apache Kafka · DevOps with Docker, Kubernetes, and AWS.</p> <p>Technologies: Java 21, Spring Boot, Gradle, OpenAPI, PostgreSQL, React, TanStack React Query, TypeScript, Cypress, Vite, Docker, Kubernetes, AWS, Apache Kafka.</p>
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Grocery Retail Chain

AEM Solution Architect

03.2025 – 08.2025

Design of the microservices architecture and AEM integration with microfrontends for the online store of a food retailer.

Activities: Assessment of the current state · advisory on the microservices strategy (Spring Boot, Java EE, Go) and the planned shift toward Go · backend development in the AEM environment · advisory on AEM as a Cloud Service & MongoDB · coaching of the development team · stakeholder management.

Technologies: TypeScript, Vue.js, Java, Spring Boot, Go, AWS, GCP, AEM as a Cloud Service.

Insurance Company

Solution Architect, Frontend Developer

10.2024 – 03.2025

Migration of legacy booking flows on the public website to modern frontend/backend technologies using REST microservices and React components in AEM. Concept, design, coaching, and implementation.

Activities: Business requirements analysis, user stories, sprint backlog · global architecture and microfrontend integration with JWT authentication · concept for React integration in AEM and development guidelines · coaching of development teams · MVP and go-live · login with MS Identity Provider, tariff changes, application flows, contact form, newsletter · TypeScript interfaces for REST services.

Technologies: TypeScript, React 18.3, Java, Spring Boot REST Services, OpenAPI, AWS, Docker, AEM as a Cloud Service.

IT Service Provider

Solution Architect, Fullstack Developer

01.2024 – 12.2024

Web application for configuration and statistical analysis of forms and surveys (e.g. customer feedback): drag-and-drop editor, dynamic validation, T-test/ANOVA analyses, data export, reporting, role-based access.

Activities: Requirements engineering with business owner, architecture of frontend and backend microservices · frontend with Angular 18 & Signals, dynamic component loading · configuration editor with drag-and-drop and dynamic validation rules · REST API design and reactive microservices · MongoDB 7 as NoSQL database · unit and integration tests.

Technologies: TypeScript, Angular 18, Signals, Angular Material, RxJs, Java 22, Spring Boot Reactive WebFlux 3, Spring Security, MongoDB 7, JUnit, Mockito, Jasmine, Karma, Kubernetes.

Banking Group

Solution Architect, Fullstack Developer

12.2019 – 09.2023

Public Websites Tools & Marketdata: migration of web applications for of the group from a legacy portal architecture to REST microservices and Angular frontends, integrated into AEM. Sub-projects included calculators, order journeys, process editor, virtual securities portfolio, user login, market data platform, feedback manager, and form generator.

Architecture & Concept Design: Requirements engineering with multiple departments, stakeholders and external service providers · Domain-Driven Design for microservices and microfrontends · modeling of the Kubernetes infrastructure with ArchiMate · design of infrastructure, security policies, cloud architecture, caching, login.

Hands-on Development: Development of multiple Angular applications, finance tools, form generator (JSON Schema), virtual securities portfolio, process editor (custom code with Angular Schematics) · complex Angular-in-AEM integration scenarios · multiple Spring Boot REST microservices · security & JWT-OAuth across multiple systems.

Coaching & Cloud Migration: Coaching of the development team · Kubernetes cloud architecture design (GCP) · subsequent migration to OpenShift.

Technologies: TypeScript, Angular 16, Java 8/11, Spring Boot (RestTemplate, Reactive WebFlux), Hibernate, Oracle DB, OAuth 2.0, Swagger, Kubernetes, OpenShift, ArchiMate, AEM 6.5, JUnit, Mockito, Powermock.

Munich Motorcycle Manufacturer

Fullstack Developer

04.2019 – 12.2019

Warehouse management software for a new warehouse: modules for goods receipt/issue, transfers, reservation, lending, inventory, role and permissions management.

Activities: Frontend with Angular 8 & Angular Material, NgRx state management · reusable components for warehouse processes · modeling of the database domain model · REST services for warehouse logic · SQL/PL-SQL development · unit and integration tests.

Technologies: TypeScript, Angular 8, Angular Material, RxJs, NgRx, Java 11, Spring Boot 2.0, Spring JPA, Oracle 12c, PL/SQL, Stored Procedures, JUnit, Mockito.

Mortgage Bank

Fullstack Developer, Scrum Master

04.2018 – 03.2019

Digitalization initiative to replace paper-based internal processes: analysis and modeling of the business processes for sample-based audit of loan files, and development of a workflow web application with role-based permissions.

Activities: Analysis and modeling of the business processes · frontend with React and state management with Redux · intuitive user interfaces and components · network security and infrastructure planning · REST API design and BPM workflow implementation · Entity-Control-Boundary pattern in the backend microservice · JWT login · MongoDB data modeling · coaching of the customer team in agile development · unit and integration tests.

Technologies: TypeScript, React, Redux, Jest, React-Testing-Library, Java 8, MongoDB, Mongo driver, Java CDI, Eclipse Microprofile, WildFly, Node.js, Express, Webpack, GitLab, JUnit, Mockito.

Munich Automotive

Enterprise Architect

10.2017 – 03.2018

Delivery of an AEM platform with base components and infrastructure pattern solutions for all corporate websites.

Activities: Infrastructure planning · adaptation of infrastructure integration · identification of requirements aligned with the project vision · user story creation · supervision of two external service-provider development teams · communication with business units.

Technologies: AEM 6.1, Node.js, Vue.js.

EARLIER PROJECTS (BEFORE 2017)

Insurance Company - Website, online banking AEM, Java, JavaScript (Solution Architect, 05 – 09.2017)

Hannover Direct Bank - Website, online banking AEM, Java, JavaScript (Solution Architect, 10.2014 – 04.2017)

Munich Automotive - Website relaunch with AEM, Java, JavaScript (Solution Architect, 04.2011–09.2014)

Grocery Retail Chain – Blog architecture with AEM Social (Solution Architect, 03–04.2014)

Energy Services – Sales platform, AEM iPad integration (Solution Architect, 01–02.2014)

Travel Services – Hotel search with AEM, MongoDB, Solr (Solution Architect, 04–12.2013)

Munich Automotive – ESB REST/JMS for CRM integration (Backend Developer, 06–09.2012)

Pharma – Documentum workflow, regulatory packaging approval (Java Backend Developer, 09.2008–04.2011)
Braunschweig Automotive Bank – CMS relaunch, online banking in AEM (Full-stack Developer, 06.2010–04.2011)
Food & Beverage – Architecture & code reviews (11.2010)
Ingolstadt Automotive – CMS Portal 2.0, dealer migration, CMS release with AEM (Full-stack Developer, 09.2009–05.2010)
Pharma - CMS Portal with AEM (06–07.2009)
Ingolstadt Automotive – CMS Portal, dealer migration, CMS release with AEM (Full-stack Developer, 03–06.2009)
Munich Telecom – Struts/EJB3 (Backend Developer 01.2006–09.2007)

PUBLICATIONS

03.2024

Master's Thesis (TU Munich, EMBA)

"Challenges and Opportunities in Agile Projects in Big Corporations" — Analysis of 40 industry studies combined with an original quantitative survey; focus on scaling patterns and scale-free networks with communication hubs as success factors for agile transformations.

<https://www.ivaylotonev.com/pdf/To24.pdf>

09.2008

Diploma Thesis (TU Munich)

"Analysis and evaluation of integration options for Content and Document Management Systems from different vendors via the JSR 170 API"

<https://www.ivaylotonev.com/pdf/To08.pdf>
