

Aleksei Pikalov

Solution Architect

About

I design systems that handle complexity — whether it's **900+ microservices**, multi-vendor ecosystems, or rapid business scaling from zero to millions of customers.

My experience spans telecom, finance, and logistics — from greenfield startups to **€30B enterprise programs**. I bring a strong foundation in domain-driven design, TOGAF, and telecom frameworks (eTOM, SID, TAM).

Currently at **Telefónica Germany**, I'm leading 5G network automation initiatives — designing end-to-end enterprise architecture for network slicing and pioneering AI agent integration for autonomous workflow execution.

When I'm not architecting systems, I'm exploring the intersection of AI and process automation, building side projects, and mentoring engineering teams.

Experience

2024 – PRESENT

Solution Architect · Telefónica Germany

Leading 5G network automation at Germany's third-largest mobile operator (45M subscribers).

Designing end-to-end enterprise architecture for network slicing and service fulfillment.

- ▶ Architected 5G slicing platform integrating multiple network domains into unified fulfillment workflow
- ▶ Aligned multi-vendor delivery across Ericsson, Nokia, Blue Planet, and Siemens
- ▶ Pioneering AI agent integration for autonomous workflow execution

5G Network Slicing AI Agents TOGAF

2022 – 2024

Domain Architect · Deutsche Telekom

Owned end-to-end architecture for Service Fulfillment domain within Deutsche Telekom's €30B fiber expansion — Germany's largest FTTH rollout reaching 10M+ households.

- ▶ Architected 900+ microservices ecosystem with zero-touch automation
- ▶ Built BPM practice on Camunda, achieving 99%+ process reliability
- ▶ Led architecture governance across 40+ distributed teams

Microservices Camunda BPM Kubernetes Kafka

2015 – 2022

Solutions Architect · Deutsche Telekom

Built foundational architecture for Deutsche Telekom's FTTH program — microservices patterns, BPM practices, and governance frameworks later scaled to 40+ teams.

Java REST APIs Docker CI/CD

2013 – 2015

Solution Architect · YOTA

Designed IT landscape from greenfield for one of the fastest-growing mobile operators — 0 to 1.5M customers in 12 months.

- ▶ Architected BSS/OSS platform supporting 10x growth
- ▶ Coordinated multi-vendor ecosystem as single architectural authority

BSS/OSS CRM Telecom

2010 – 2013

Software Architect · Giesecke & Devrient

Software Architect & Team Lead for banknote processing systems — mission-critical software for central banks and currency printing facilities worldwide.

Team Lead Scrum Master Java

2008 – 2010

Lead Software Engineer · Veeam Software

Lead Engineer on nworks Smart Plug-In for HP Operations Manager — enterprise VMware monitoring evolved into Veeam ONE.

Java VMware Linux

2006 – 2008

Software Architect · Alcatel-Lucent

Software Architect for Microsoft IPTV (Mediaroom) integration — enabling telecom operators to launch IPTV services. Delivered for Wind (Italy), SingTel (Singapore), Portugal Telecom.

IPTV

Integration

.NET

2004 – 2006

Software Developer · Reksoft

Software Developer building components for Saxo Bank e-trading platform. First professional role — foundational experience in commercial software development.

ASP.NET

C#

SQL Server

Skills

ARCHITECTURE

Solution Architecture, Enterprise Architecture, System Design, Distributed Systems, High Availability, Scalability, TOGAF

CLOUD & INFRASTRUCTURE

AWS, GCP, Kubernetes, Docker, Terraform, Infrastructure as Code, CI/CD, DevOps

DEVELOPMENT

Java, REST APIs, Event-Driven Architecture, Microservices, Kafka, GraphQL, API Design

PROCESS & AUTOMATION

Camunda BPM, BPMN, Workflow Automation, AI Agents, LangChain, Process Orchestration

LANGUAGES

English

C1

German

B2

Russian

Native

CERTIFICATIONS

TOGAF 9

2017

GCP Cloud Architect

2022

AWS Solutions Architect

2022

EDUCATION

Saint Petersburg State Marine Technical University

1999 – 2005

Engineer's Degree in Computer Science