Simon Mokrov | Backend Developer

Amsterdam, the Netherlands

CONTACTS

ABOUT ME

Backend Developer with almost 4 years of total experience designing and implementing scalable, high-performance server-side applications and APIs. Skilled in Java (Spring Boot, Java EE), NestJS, TypeScript, relational or non-relational database,s and Docker, with strong expertise in building secure, maintainable architectures and integrating complex systems.

Professional experience spans enterprise retail, EdTech, and banking software, delivering measurable improvements in system scalability, backend performance, and reliable feature delivery within Agile teams. Experienced in designing RESTful and event-driven architectures, implementing CI/CD pipelines, and optimizing data storage.

Holds a **Master's in Digital Driven Business** (AUAS, Amsterdam), with a focus on data-driven development, machine learning, and statistics. Passionate about building robust backend systems, improving system performance, and contributing to reliable, scalable software solutions.

BACKEND EXPERIENCE (≈ 4 YEARS)

1. Backend Developer

ITMO University – Banking software for Gazprombank

Enhanced internal systems for bank guarantees, optimizing backend workflows and enterprise data processing.

Tech stack: Java, Kotlin, Spring Boot, Gradle, PostgreSQL, Kafka, SOAP, Docker

- Reduced average response latency by 12% via endpoint refactoring.
- Improved PostgreSQL query execution by up to 20%.
- Cut report build time from 90s to 60s.
- Lowered server load by 20% after migrating to Kafka.

2. Full Stack Developer (Backend-focused)

Nov 2023 - Apr 2024

July 2024 - Feb 2025

Tune IT — EdTech solutions

Developed and maintained the Skillfactory educational platform and the Polytech introduction system, focusing on backend scalability and modularity.

Tech stack: Spring Cloud, Java, Kotlin, PostgreSQL, Redis, React, TypeScript, RTK Query, Docker

- Resolved 30+ issues, improving system stability.
- Reduced design-to-development cycle by 25% with improved backend APIs.
- Cut service latency by 13% through modularization with Spring Cloud.

3. Full Stack Developer (Backend-focused)

Mar 2023 - Nov 2023

Jan 2022 - Jun 2022

MagicGophers – Social apps for VK (largest social network in Russia)

Built backend services and APIs for VK mini-apps, ensuring performance, scalability, and data consistency.

Tech stack: NestJS, PostgreSQL, Redis, React, VK API, Docker

- Delivered apps adopted by 10,000+ users.
- Reduced bug reports by 30% within 6 months.
- Optimized DB queries, reducing latency by 25%.

4. Backend Developer (Internship)

ITMO University — EdTex (OpenEdu - online learning platform)

Refactored a legacy Spring monolith (course update flow) and delivered a standalone certificate service.

Tech stack: Java, Spring (Spring Boot), Quarkus, Hibernate, Micrometer, PostgreSQL, MinIO, Docker

- Refactored the course update flow in the monolith, reducing median request latency by 8%.
- Built a Quarkus-based certificate service with Hibernate, decoupling issuance from the monolith and enabling independent scaling.
- Added Micrometer observability on a separate physical machine to expose production metrics for analysis and capacity planning.
- Containerized components with Docker; used MinIO for object storage.

FRONTEND EXPERIENCE

1. Frontend Developer

March 2024 - Present

X5 Tech — Largest retail in Russia

Developed and supported subscription services ("Package", "Abonement") in a corporate, cross-functional environment.

Tech stack: React, TanStack Query, pnpm, Axios, Chart.js, Python & FastAPI (reading)

- Increased customer retention by 12% through frontend improvements.
- Reduced release time-to-market by 15% within 6 months.
- Reduced production issues by 18% after refactoring codebase.

2. Frontend Developer July 2022 - Mar 2023

ITMO University – EdTech (remote exam monitoring)

Redesigned frontend for ITMOproctor, improving scalability and user experience.

Tech stack: React, Redux, Vue.js, JavaScript, WebRTC, WebSockets, Axios

- Reduced time-to-market for new features by 20% through modular architecture.
- Decreased load times by 10% with optimized routing, state, and sockets.
- Enabled secure streaming for 5,000+ concurrent exams using WebRTC.

RELATED EXPERIENCE

1. Machine Learning Engineer, X5 Tech

Feb 2025 - Apr 2025

Tech stack: Python, pandas, scikit-learn, SHAP, XGBoost

Built a churn prediction model and a pricing simulation pipeline for subscriptions. Integrated results into dashboards and validated impact with A/B testing, supporting pricing optimization.

2. Teaching Assistant, ITMO University

Sep 2022 - Feb 2023

Tech stack: Java, Spring Boot, PHP, JavaScript, React, Vue.js, Angular, HTML, CSS

Guided first-year students in programming and web development. Led Java sessions and mentored full-stack projects, enhancing technical and teaching skills.

3. CMS on FastAPI 2024

Tech stack: Python, FastAPI, PostgreSQL, Vue.Js, Vuex

Built a CMS in a contract team project with FastAPI and PostgreSQL. Delivered a scalable solution with authentication, data modeling, and a customized admin interface.

SKILLS

Programming languages Java, Kotlin, TypeScript, JavaScript (ES6+), Python, C

Spring Boot (Data, Security, MVC, JTA, Reactive), Java EE, Quarkus, NestJS, FastAPI **Backend frameworks**

Kafka, RabbitMQ, Amazon SQS, WebSockets, Server-Sent Events (SSE) Messaging

REST, GraphQL, gRPC, Swagger Networking

Monitoring Grafana, Prometheus, ELK Stack, Sentry, Micrometer

Databases PostgreSQL, MySQL, Oracle, MongoDB, Redis, Spring Data, Hibernate, TypeORM, MiniO (S3-like) **DevOps** Docker, Git (GitHub, GitLab), CI/CD pipelines, AWS, Nginx, monorepo management, Maven, Gradle

Testing JUnit, Jest, Vitest, Cypress, Playwright, Scrapy, Selenium

Frontend React, Redux, Vue, Next.js, Electron, Reac, CSS3, HTML5, pnpm, vite, webpack

Machine learning NumPy, pandas, scikit-learn, PyTorch, XGBoost

EDUCATION

Master (MSc) AUAS (HvA) Bachelor (BSc) **ITMO University** Amsterdam, the Netherlands 2024 - 2025 Saint-Petersburg, Russia 2020 - 2024

Major: Digital Driven Business Major: Software Engineering

Coursework:

- Statistical testing

- Machine learning

Clustering

Deep learning

Scrapy & Selenium

RecSys

MLR models

Research skills

Ozyegin University

2023 - 2023

Major: Computer Science (exchange)

Bachelor (BSc - Exchange semester)

Coursework:

Istanbul, Turkey

- Testing and analyzis

- **Parallel Computing**
- Advanced Databases
- Computer Networks

Web and low-level programming

Probability and queueing theory Algorithms and data structures

- Advanced and computational math

Operating systems

Databases

Patterns

Coursework:

- Microservices